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ANNUAL REPORT 1955-56

LOS ANGELES STATE and COUNTY ARBORETUM



VS. 00

L A S C A
M I S C E L L A N E A
V O L . 4 - O C T . 1956

COUNTY OF LOS ANGELES



OUR COVER



THIS IS AN AREIAL VIEW OF THE MOST POPULAR AREA OF THE ARBORETUM.

THE FIVE ACRE LASCA LAGOON BISECTS THE LAND WITHIN THE CIRCULAR ROAD.

JUST LEFT OF CENTER CAN BE SEEN THE TOWER AND STEEPLY PITCHED ROOF OF THE "QUEEN ANNE COTTAGE". RECENTLY RESTORED AND FURNISHED, THIS STRUCTURE BUILT BY E. J. "LUCKY" BALDWIN IN 1881, IS NOW HISTORICAL LANDMARK #367 OF THE STATE OF CALIFORNIA.

TO THE SOUTHWEST, STANDING QUITE CLOSE TO THE ROAD, IS THE COACH BARN. THE CARRIAGES AND RACE HORSES OF "LUCKY'S" OCCUPIED THIS STRUCTURE. THE INTERIOR OF THE BARN IS FINISHED IN REDWOOD AND CEDAR PANELING.

ON A LINE WITH THE COACH BARN, BUT TO THE EAST, IS THE REID ADOBE HOUSE. THIS BUILDING WAS ERECTED ON RANCHO SANTA ANITA BY ITS FIRST OWNER, HUGO REID, IN 1839.

THE "QUEEN ANNE COTTAGE", COACH BARN AND REID ADOBE CONSTITUTE THE HISTORICAL SECTION.

IN THE FOREGROUND, THE DENSE VEGETATION ON THE NORTH SHORE OF THE LAGOON IS THE JUNGLE. A MOST POPULAR TOUR FOR CHILDREN AND ADULTS ALIKE, THIS AREA IS A NATURAL TANGLE OF WILD GRAPEVINES, HONEYSUCKLE, FALLEN TREES, ORCHIDS, GINGER, PALMS BAMBOO AND WILLOWS.



LOS ANGELES STATE and COUNTY ARBORETUM

301 No. Baldwin Avenue, Arcadia, California

WILLIAM S. STEWART
DIRECTOR

Cable: LASCA, Arcadia, Calif.

Telephone: DOuglas 6-5247

GEORGE H. SPALDING
SUPERINTENDENT

July 2, 1956

Honorable Board of Supervisors,
County of Los Angeles,
501 Hall of Records,
Los Angeles 12, California.

Gentlemen:

On behalf of the staff of the Los Angeles State and County Arboretum, it is my privilege to submit the third Annual Report. This summarizes our accomplishments for the fiscal year 1955-56.

During this period development of the grounds has continued at full scale. The research program reached about 25% of its ultimate scope while the educational program, just initiated in the spring of 1956, operated at about 10% of its planned final capacity. It is expected development of the Arboretum, at Arcadia, will continue at 100% for several years while the educational and research program will gradually increase. Then as development of the grounds reduces to about a 20% level the research and education program will be at peak operation. At this time the maximum value of the Arboretum to the community will be realized.

While the future promises much, the valuable contributions of the Arboretum which have already been achieved are presented in this report for your review.

Respectfully submitted,

William S. Stewart
William S. Stewart,
Director.

WSS/jd

LOS ANGELES COUNTY

DEPARTMENT OF ARBORETA AND BOTANIC GARDENS

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BURTON W. CHACE	-	4TH DISTRICT
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ROGER W. JESSUP	-	5TH DISTRICT
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ARTHUR J. WILL, CHIEF ADMINISTRATIVE OFFICER

LOS ANGELES COUNTY

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FRANK E. TITUS

TABLE OF CONTENTS

WHAT IS AN ARBORETUM	1
LOCATION	2
ORGANIZATIONAL CHART	3
CALIFORNIA ARBORETUM FOUNDATION, INC	4
INTRODUCING OUR NEW DIRECTOR	7
CAPITAL IMPROVEMENTS	8
ARBORETUM TOURS	11
HORTICULTURE	16
PLANT PROPAGATION	20
PLANT AND WEATHER RECORDS	22
RESEARCH	25
EDUCATION	31
ARBORETUM LIBRARY	34
SPECIAL EVENTS	35
PUBLIC RELATIONS	38
GOOD-BY	39

WHAT IS AN ARBORETUM

FUNDAMENTALLY, AN ARBORETUM IS A PLACE WHERE ONE CAN SEE, STUDY AND LEARN ABOUT PLANTS!

THE LOS ANGELES STATE AND COUNTY ARBORETUM FULFILLS THIS DEFINITION. IN ADDITION, WITHIN ITS 127 ACRES CAN BE FOUND HISTORICAL RESTORATIONS OF EARLY CALIFORNIA RANCHO LIFE.

FOR INSTANCE, THERE IS A CONDUCTED JEEP TRAIN TOUR OF THE GROUNDS, WHICH IS INSTRUCTIVE AND ENTERTAINING. THE PLANTS BEING ACCURATELY LABELED, A WALKING TOUR IS BOTANICALLY ENLIGHTENING. ORGANIZED CLASSES IN BOTANY AND HORTICULTURE ARE DEVELOPING. A VARIETY OF DEMONSTRATION GARDENS ARE TO BE SEEN FROM WHICH TO TAKE IDEAS HOME AND PLANT THEM. COUNSULTATION IS AVAILABLE CONCERNING PLANT PROBLEMS AND PLANT IDENTIFICATION.

ALL THESE FACETS OF THE ARBORETUM'S DAILY LIFE MIGHT WELL BE TITLED 'EDUCATION'.

A SECOND, BUT OFTEN LESS OBVIOUS, PHASE OF THE ARBORETUM'S PROGRAM IS RESEARCH.

THERE IS PLANT INTRODUCTION AND TESTING RESEARCH. NEW HORTICULTURAL VARIETIES FROM WORLD WIDE SOURCES ARE BEING PLANTED HERE. IT IS THE HOPE THAT SOMETHING NEW IN FLOWER, COLOR, FRUIT OR FORM OF PLANT WILL BE ADDED, FROM TIME TO TIME, TO THE LANDSCAPING OF SOUTHERN CALIFORNIA HOMES AND CIVIC PLANTINGS.

THERE IS TURFGRASS RESEARCH. FERTILIZERS, WEED KILLERS, FUNGICIDES, SOIL STERILANTS AND OF COURSE, GRASS SPECIES COME UNDER THIS PROGRAM. AGAIN, THE OBJECTIVE IS TO PROVIDE USEFUL INFORMATION CONCERNING PRACTICAL APPLICATION OF THESE MATERIALS FOR THE HOME OWNER.

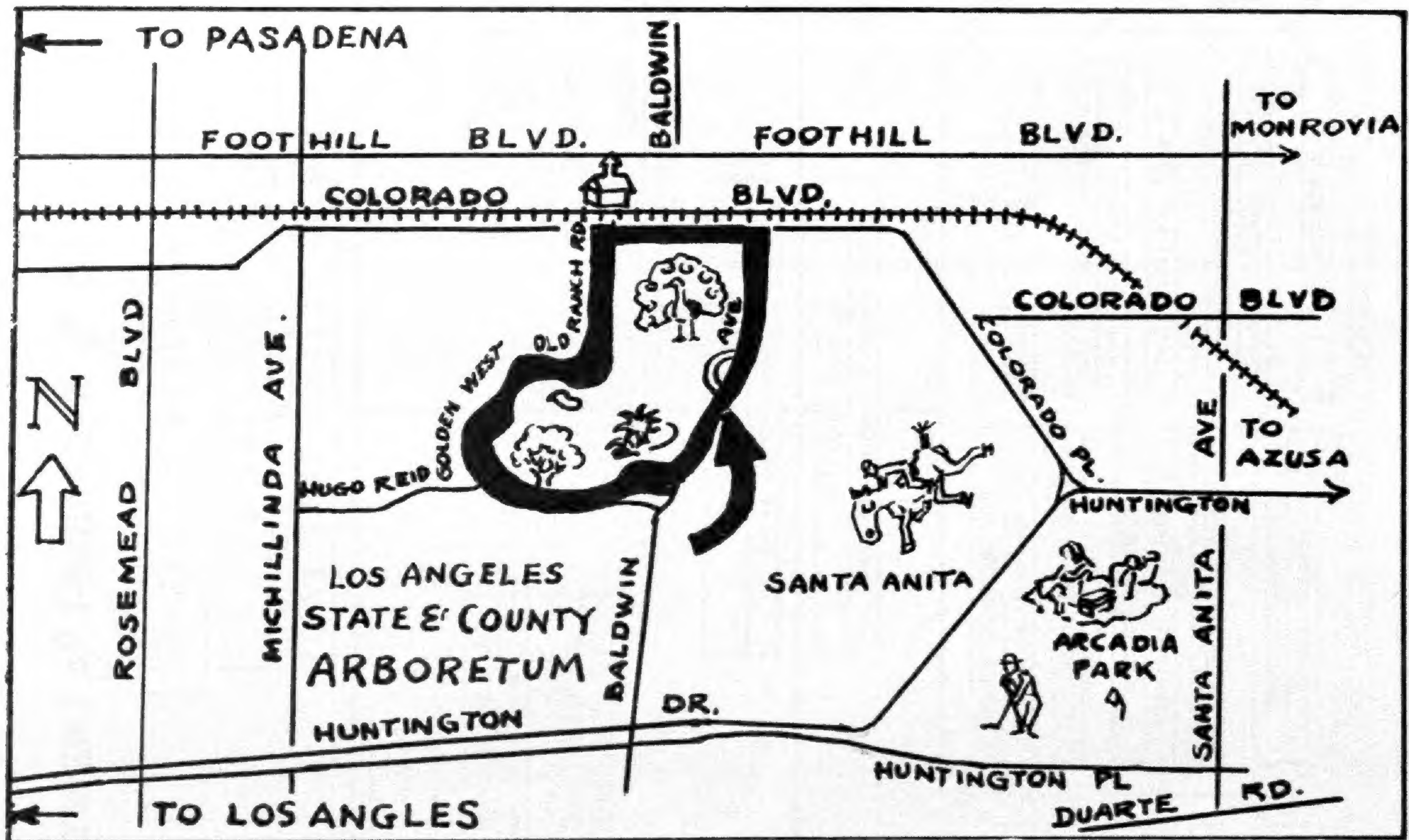
THERE IS COOPERATIVE RESEARCH WITH AGENCIES OUTSIDE THE ARBORETUM. AN EROSION CONTROLLING AND FIRE RESISTANT PLANT HUNT IS IN PROGRESS WITH THE UNITED STATES FOREST SERVICE. AT PRESENT, THE ROCK ROSE (CISTUS) APPEARS TO BE A PROMISING PLANT FOR THIS WORK. ANOTHER PROJECT IS CURRENTLY UNDER WAY WITH THE LOS ANGELES AIR POLLUTION CONTROL DISTRICT.

AN ARBORETUM THEN CONCERNS ITSELF WITH PLANT INTRODUCTIONS, PLANT TESTING, PLANT RESEARCH AND PLANT EDUCATION. ITS ULTIMATE GOAL IS SERVICE TO ITS IMMEDIATE GEOGRAPHICAL AREA THROUGH IMPROVEMENT IN THE HORTICULTURAL PURSUITS OF THAT AREA.

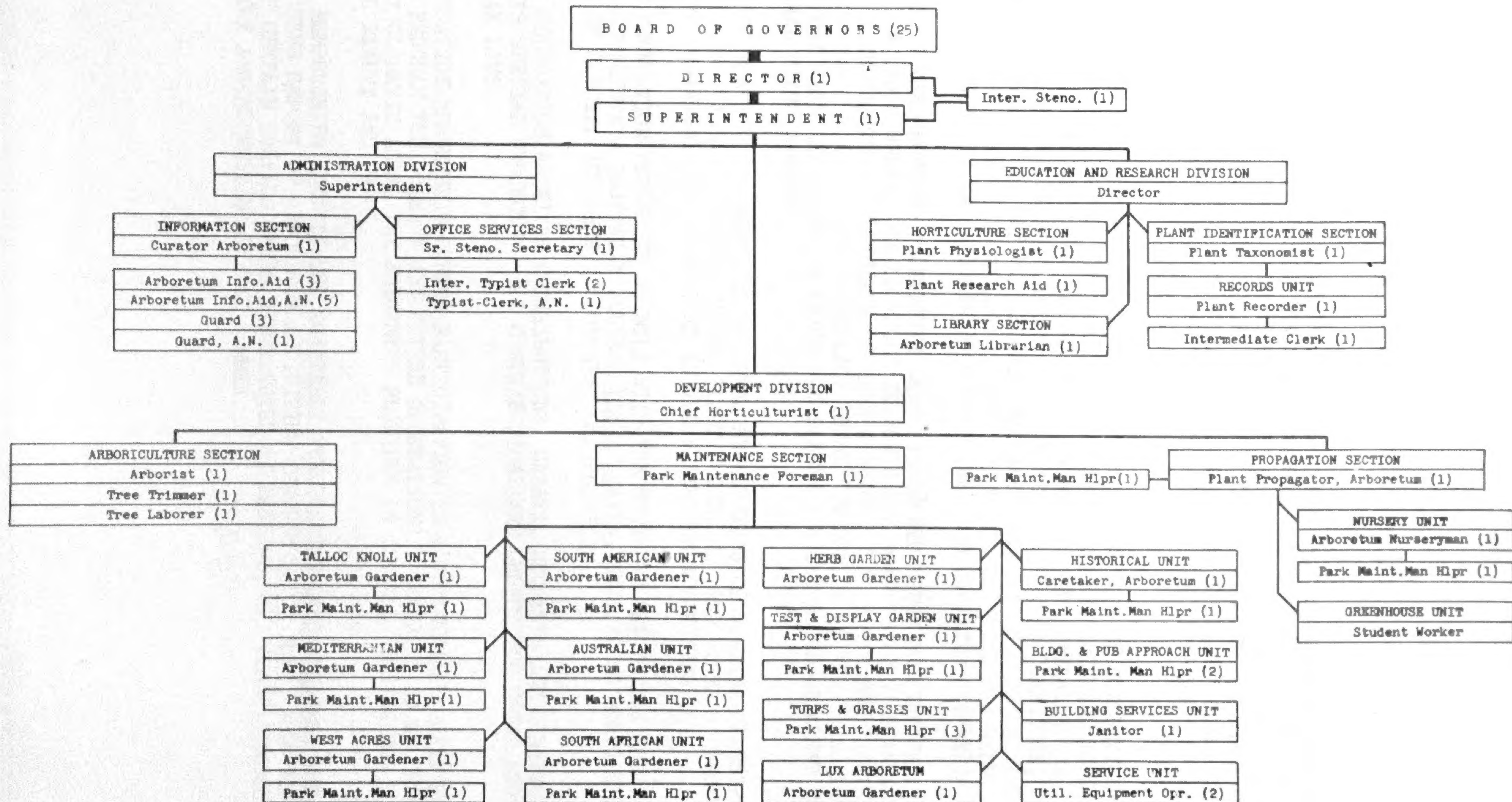
A STRONG IMPETUS IS GIVEN TO AN ARBORETUM IN SOUTHERN CALIFORNIA BY THE NEARLY YEAR AROUND GARDENING CONDITIONS AND A PROJECTED POPULATION IN TEN YEARS OF 10,000,000 WITHIN THE COUNTY OF LOS ANGELES.

LOCATION

THE ARBORETUM IS LOCATED IN THE CITY OF ARCADIA A FEW MILES EAST OF PASADENA AND LESS THAN A 40 MINUTE DRIVE BY CAR FROM THE LOS ANGELES CIVIC CENTER. THE MAIN ENTRANCE AND PARKING AREAS ARE FOUR BLOCKS SOUTH OF COLORADO BOULEVARD AT 301 NORTH BALDWIN AVENUE.



DEPARTMENT of ARBORETA & BOTANIC GARDENS



CALIFORNIA ARBORETUM FOUNDATION, INC.

THE CALIFORNIA ARBORETUM FOUNDATION IS A NON-PROFIT ORGANIZATION INCORPORATED UNDER THE LAWS OF CALIFORNIA ON FEBRUARY 20, 1948 BY A GROUP OF CIVIC-MINDED MEN AND WOMEN INTERESTED IN THE ESTABLISHMENT OF A HORTICULTURAL CENTER WHICH BECAME THE LOS ANGELES STATE AND COUNTY ARBORETUM. SINCE JULY 1, 1953, UNDER AGREEMENT WITH THE COUNTY BOARD OF SUPERVISORS, THE ARBORETUM IS BEING OPERATED, MAINTAINED AND FURTHER DEVELOPED BY THE DEPARTMENT OF ARBORETA AND BOTANIC GARDENS OF LOS ANGELES COUNTY.

THE FOUNDATION, AS OF JULY 1, 1953, HAS THE FUNCTION OF CONDUCTING FOR PUBLIC BENEFIT ANY SPECIAL HISTORICAL, HORTICULTURAL, RESEARCH AND EDUCATIONAL ARBORETUM PROJECTS FOR WHICH PUBLIC TAXES ARE NOT AVAILABLE. A MAJOR ACHIEVEMENT OF THE FOUNDATION, THROUGH THE HISTORICAL COMMITTEE, HAS BEEN THE RESTORATION OF THE "QUEEN ANNE COTTAGE", SOLELY THROUGH PRIVATE FINANCING. ALSO, THE HERB GARDEN, A FASCINATING PLACE, WHICH HAS BEEN FINANCED BY THE SOUTHERN CALIFORNIA UNIT OF THE HERB SOCIETY OF AMERICA.

SOME OF THE PROPOSED OBJECTIVES ARE: AN ORCHID HOUSE OF FIVE UNITS FOR PROPAGATION AND DISPLAY, ONE OF WHICH IS NOW UNDER CONSTRUCTION, THANKS TO A GENEROUS BENEFACTOR; COLLECTION OF RARE HORTICULTURAL BOOKS FOR THE LIBRARY; FOUNDATION OWNED JEEP TRAINS TO REPLACE THOSE NOW RENTED BY THE FOUNDATION; AND LAST BUT VERY IMPORTANT, A FRAGRANCE GARDEN FOR THE BLIND ADJACENT TO A MEDICINAL PLANT GARDEN.

THE FOUNDATION IS ORGANIZED TO OFFER MEMBERSHIPS OF VARYING CLASSIFICATIONS TO INDIVIDUALS, GARDEN CLUBS, PLANT SOCIETIES, AND OTHER SPONSORED GROUPS AND ORGANIZATIONS INTERESTED IN THE ARBORETUM ACTIVITIES.

THE FOUNDATION PUBLISHES JOINTLY WITH THE SOUTHERN CALIFORNIA HORTICULTURAL INSTITUTE A QUARTERLY JOURNAL LASCA LEAVES, DEVOTED TO HORTICULTURAL SUBJECTS OF SPECIAL INTEREST TO SOUTHERN CALIFORNIANS.

THE FOUNDATION RECEIVES CONTRIBUTIONS, GRANTS, BEQUESTS AND DONATIONS TOWARD ITS SPECIAL PROJECTS. ALL CONTRIBUTIONS ARE DEDUCTIBLE UNDER FEDERAL INCOME TAX LAWS.

FOUNDATION MEMBERSHIP OFFERS PARTICIPATION IN A POTENTIALLY GREAT HORTICULTURAL PROGRAM FOR PRESENT AND FUTURE GENERATIONS. SITUATED IN AN UNIQUELY FAVORABLE CLIMATIC AREA, THE ARBORETUM PROVIDES AN UNUSUAL SETTING FOR SPIRITUAL BEAUTY AND PEACE.

ALL MEMBERSHIPS INCLUDE THE QUARTERLY PUBLICATION LASCA LEAVES, THE PERIODIC NEWS REPORT OF ARBORETUM ACTIVITIES THROUGH LASCA NEWS, AND THE CHOICE OF CERTAIN SURPLUS SEEDS DISTRIBUTED IN JANUARY, AND PLANT DISTRIBUTION AT THE ANNUAL MEETING IN THE SUMMER.

CALIFORNIA ARBORETUM FOUNDATION, INC.

BOARD OF TRUSTEES

FRITS W. WENT, PRESIDENT

RALPH D. CORNELL, VICE PRESIDENT

MRS. JOHN R. MAGE, VICE PRESIDENT

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PRESIDENT, MEN'S GARDEN CLUB OF LOS ANGELES

PRESIDENT, CALIFORNIA GARDEN CLUBS, INC.

PRESIDENT, SOUTHERN CALIFORNIA HORTICULTURAL INSTITUTE

CHAIRMAN, CALIFORNIA INTERNATIONAL FLOWER SHOW

CALIFORNIA ARBORETUM FOUNDATION, INC.

BOARD OF COUNCILORS

"THERE SHALL BE A BOARD OF COUNCILORS NOT TO EXCEED FIFTY (50) IN NUMBER, APPOINTED BY THE BOARD OF TRUSTEES. THE DUTIES OF COUNCILORS AS A BOARD OR AS INDIVIDUALS SHALL BE TO AID IN THE AFFAIRS OF THE FOUNDATION AS REQUIRED BY THE BOARD OF TRUSTEES. A COUNCILOR SHALL SERVE FOR A TERM OF THREE YEARS UNLESS REAPPOINTED. ALL COUNCILORS MUST BECOME MEMBERS OF CALIFORNIA ARBORETUM FOUNDATION, UNLESS WAIVED IN ANY PARTICULAR CASE BY A MAJORITY VOTE OF THE BOARD OF TRUSTEES."

JOHN E. BARBER

GUY R. MCCOMB

DAVID BARRY, JR.

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DR. & MRS. ELMER BELT

MANFRED MEYBERG

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DR. FRANS VERDOORN

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DR. RUFUS B. VON KLEINSMID

ALEXANDER KING

MISS ABIGAIL VON SCHLEGELL

MRS. T. R. KNUDSEN

MRS. IRVING WALKER

WALTER H. LEIMERT

MRS. ARCHIBALD B. YOUNG

INTRODUCING OUR NEW DIRECTOR.



DR. WILLIAM S. STEWART, CHAIRMAN OF THE CITRUS EXPERIMENT STATION'S DEPARTMENT OF HORTICULTURE, ON JULY 12TH ACCEPTED THE POSITION OF DIRECTOR OF THE LOS ANGELES STATE AND COUNTY ARBORETUM, ARCADIA, AND HEAD OF THE DEPARTMENT OF ARBORETA AND BOTANICAL GARDENS IN LOS ANGELES COUNTY. HE SUCCEEDS DR. RUSSELL J. SEIBERT.

DR. STEWART ASSUMED HIS NEW DUTIES IN SEPTEMBER AS DIRECTOR OF THE ARBORETUM, OPERATED SINCE 1953 BY LOS ANGELES COUNTY.

IN ADDITION TO CONTINUING THE ESTABLISHED PROGRAM OF DEVELOPING NEW ORNAMENTAL PLANTS SUITABLE TO CULTURE IN SOUTHERN CALIFORNIA, INCLUDING THIRTEEN COUNTIES, DR. STEWART STATES THAT HE PLANS TO ACCELERATE A RESEARCH PROGRAM FOR THE "BACKYARD GARDENER", WHO HE POINTS OUT IS ASSUMING AN INCREASINGLY IMPORTANT ROLE IN AMERICAN LIFE. FURTHER, THE APPOINTMENT AS DIRECTOR IS PLANNED TO INCLUDE A RESEARCH ASSOCIATE APPOINTMENT AT CALIFORNIA INSTITUTE OF TECHNOLOGY WITH USE OF THE EXTENSIVE RESEARCH FACILITIES ON THE PASADENA CAMPUS.

HE WAS BORN IN SAN DIEGO AND WAS GRADUATED FROM BEVERLY HILLS HIGH SCHOOL. DR. STEWART HOLDS TWO DEGREES FROM U.C.L.A. AND WAS AWARDED A PH.D. IN PLANT PHYSIOLOGY AT CALIFORNIA INSTITUTE OF TECHNOLOGY IN 1939.

PRIOR TO JOINING THE CITRUS EXPERIMENT STATION STAFF IN 1945, HE SERVED WITH THE U.S.D.A. BUREAU OF PLANT INDUSTRY AND DURING WORLD WAR II WAS ASSIGNED TO EMERGENCY INVESTIGATIONS ON RUBBER PRODUCTION IN MEXICO.

HE LEFT THE RIVERSIDE CAMPUS IN 1950 TO SPEND THREE YEARS WITH THE PINEAPPLE RESEARCH INSTITUTE IN HAWAII, WHERE HE WAS HEAD OF THE PLANT PHYSIOLOGY DEPARTMENT.

HE RETURNED TO RIVERSIDE IN 1953 TO ASSUME CHAIRMANSHIP OF THE DEPARTMENT OF ORCHARD MANAGEMENT AT THE CITRUS EXPERIMENT STATION. SOON THEREAFTER HE BECAME CHAIRMAN OF THE DEPARTMENT OF HORTICULTURE, WHICH WAS FORMED BY COMBINING THE DEPARTMENTS OF ORCHARD MANAGEMENT AND PLANT BREEDING.

DR. STEWART HAS ALSO HEADED THE STATION COMMITTEE ON ORCHARD REJUVENATION, WHICH IS CONDUCTING A COMPREHENSIVE STUDY OF THE CAUSES OF DECREASING ORANGE SIZE AND YIELDS IN SOUTHERN CALIFORNIA. HE HAS CONTINUED HIS RESEARCH THAT LED TO THE WIDESPREAD USE OF 2,4-D AND OTHER PLANT GROWTH REGULATORS ON CITRUS.

SKIING AND HIKING ARE THE CHIEF HOBBIES OF THE STEWART FAMILY WHICH IN ADDITION TO MRS. STEWART INCLUDES MARY LEE 10, DAVID 9, CAROL ANN 4.

CAPITAL IMPROVEMENTS

ADMINISTRATION BUILDING AND GATEHOUSE

A MILESTONE IN THE DEVELOPMENT OF THE ARBORETUM WAS PASSED WHEN CONSTRUCTION OF THE ADMINISTRATION BUILDING AND GATEHOUSE WAS BEGUN IN DECEMBER, 1955.



CONSTRUCTION OF THE ADMINISTRATION BUILDING MARCH, 1956.
THE GATEHOUSE TAKING FORM IN BACKGROUND.

DANIEL BROTHERS CONSTRUCTION COMPANY OF PASADENA WERE THE LOW BIDDERS, AT \$198,496 AND WERE AWARDED THE CONTRACT BY THE LOS ANGELES COUNTY SUPERVISORS. PLANS WERE PREPARED BY ARCHITECTS ALLISON AND RIBLE OF LOS ANGELES. CONSTRUCTION IS TO BE OF PAINTED CONCRETE BLOCK WALLS, CONCRETE FLOOR AND COMPOSITION AND GRAVEL ROOF.

FROM BALDWIN AVENUE, THE ADMINISTRATION BUILDING WILL BE APPROACHED BY THREE TIERS OF BROAD CONCRETE STEPS LEADING UP TO AN ENTRANCE PAVILION AND WAITING ROOM. HERE WILL BE ILLUMINATED WALL DISPLAY CASES AND A CENTER PLANT DISPLAY CASE. FROM THIS ENTRANCE, A CORRIDOR RUNS THE LENGTH OF THE BUILDING WITH THE VARIOUS OFFICES OPENING ONTO THE HALLWAY. JUST INSIDE THE MAIN DOOR AND TO THE LEFT, IS THE RECEPTION OFFICE AND TELEPHONE EXCHANGE. THIS ADJOINS THE BUSINESS OFFICE WHICH TEMPORARILY WILL BE USED TO HOUSE THE LIBRARY. CONTINUING DOWN THE CORRIDOR ALONG THE NORTH SIDE OF THE BUILDING, OFFICES ARE LOCATED FOR THE BUSINESS MANAGER, SUPERINTENDENT,

SECRETARY AND DIRECTOR. ON THE SOUTH SIDE OF THE BUILDING, THE FIRST OFFICE WILL BE FOR THE EXECUTIVE SECRETARY OF THE ARBORETUM FOUNDATION, THEN IN SUCCESSION IS THE RESEARCH OFFICE WITH A PHOTOGRAPHIC DARKROOM AND SMALL LABORATORY, AND THE TAXONOMY OFFICE. THERE IS ALSO A BASEMENT TO HOUSE HEATING, MECHANICAL EQUIPMENT AND TO PROVIDE SOME LIMITED STORAGE AREA.

AN IMPORTANT FEATURE OF THE BUILDING WILL BE THE CONFERENCE ROOM AND MEETING GARDEN AT THE EAST END. THIS ROOM, ABOUT 20 X 40 FEET IN SIZE, OPENS BY SLIDING DOORS ONTO A WALLED PATIO GARDEN WITH COLORED CEMENT TILE FLOOR. THE CONFERENCE ROOM AND MEETING GARDEN WILL PROVIDE SPACE FOR GARDENING AND BOTANY CLASSES OF LIMITED SIZE AND FOR LECTURES AND STAFF MEETINGS. IT ALSO WILL BE AVAILABLE TO GARDEN CLUBS AND PLANT SOCIETIES FOR MEETINGS AND PLANT FORUMS. THE MEETING GARDEN OPENS TO THE OUTSIDE BY A GRILLE GATE LEADING TO A CONCRETE RAMP SLOPING GENTLY DOWN TO THE STREET LEVEL WHERE THERE IS AMPLE PARKING.

THE SECOND UNIT NOW UNDER CONSTRUCTION IS THE GATEHOUSE WHICH HAS A TOUR ASSEMBLY AREA AND WALK LEADING TO THE JEEP TRAIN STATION. FEATURES OF THE GATEHOUSE INCLUDE A PUBLIC INFORMATION OFFICE, A NATURALIST-GUIDE OFFICE AND ENTRANCE TURNSTILES. THE INFORMATION OFFICE WILL HAVE TWO INFORMATION WICKETS, A COUNTER AND IS SO ARRANGED THAT POST CARDS, BULLETINS AND BOOKS CONCERNING THE ARBORETUM, GARDENING, AND HORTICULTURE CAN BE SOLD. INSIDE THE GATE WILL BE A COVERED TOUR ASSEMBLY AREA WITH WOODEN BENCHES AND AN ATTRACTIVELY FILLED PLANTER.

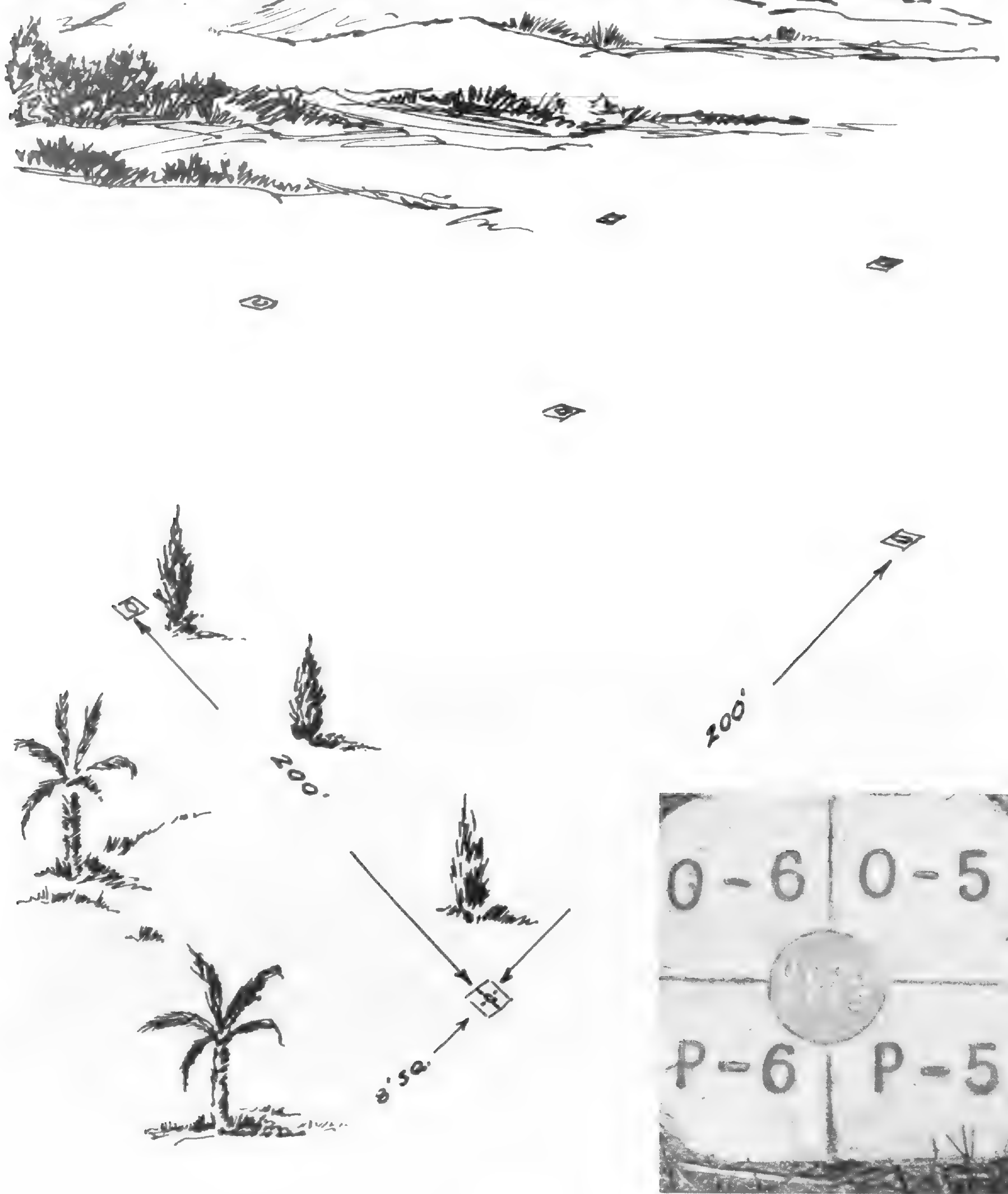
IT IS EXPECTED THAT THE BUILDING WILL BE COMPLETED IN THE FALL OF 1956 WITH THE DEDICATION IN DECEMBER.



GATEHOUSE CONSTRUCTION, JANUARY, 1956.

GRID MARKERS

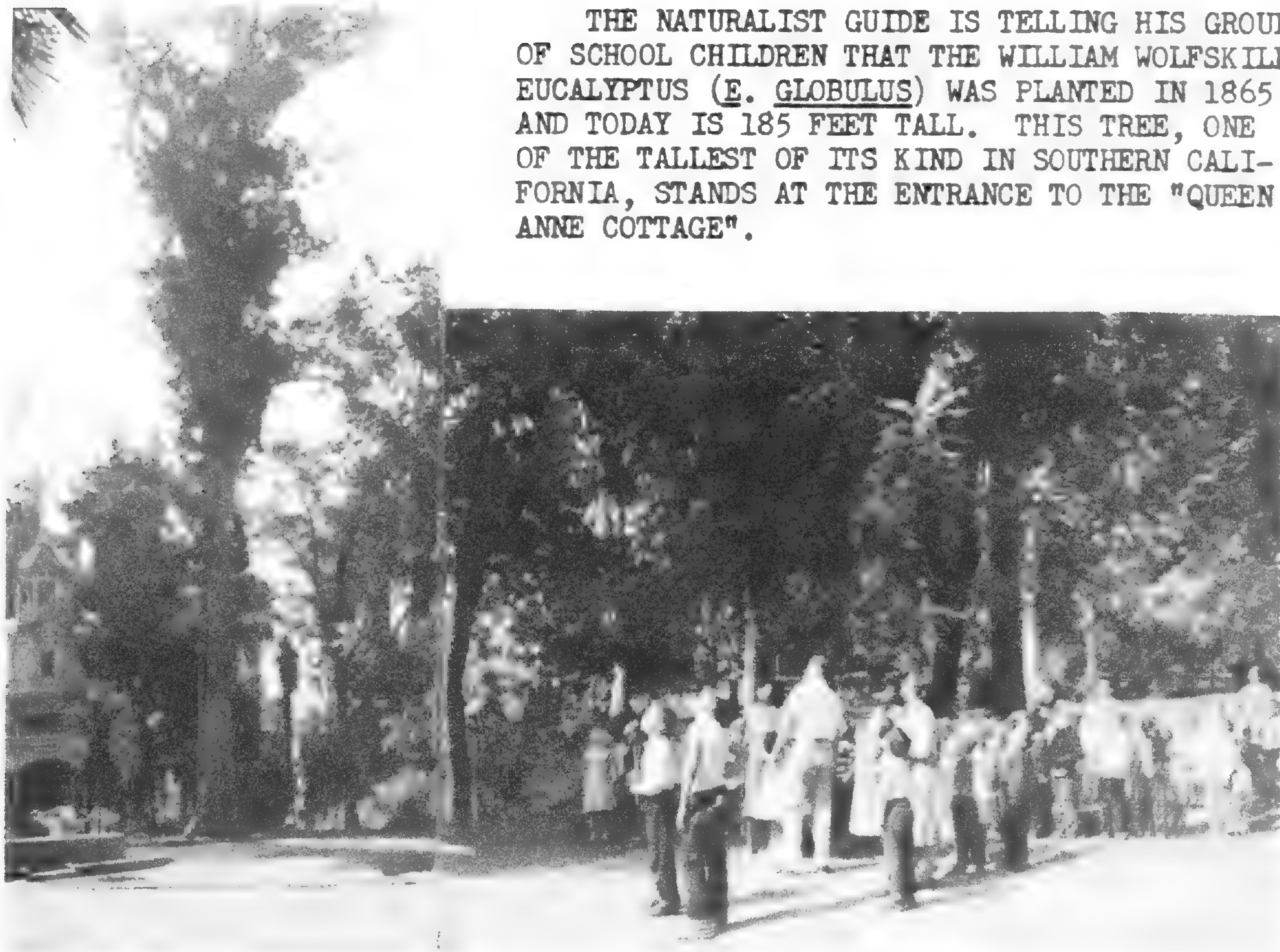
TO ALLOW PERMANENT REFERENCE MAPPING OF ALL OF THE EXISTING PLANTS, AND THOSE TO BE GROWN, CONCRETE MARKERS WERE INSTALLED ON A 200 FOOT GRID PATTERN THROUGHOUT THE ARBORETUM GROUNDS. THE GARDENER FOR EACH SECTION, WORKING IN COOPERATION WITH THE PLANT RECORDER AND TAXONOMIST, WILL LOCATE THE PLANTS ON CORRESPONDING MAPS SO THAT EVEN IF THE FIELD LABELS ARE LOST, ACCURATE RECORDS WILL BE MAINTAINED.

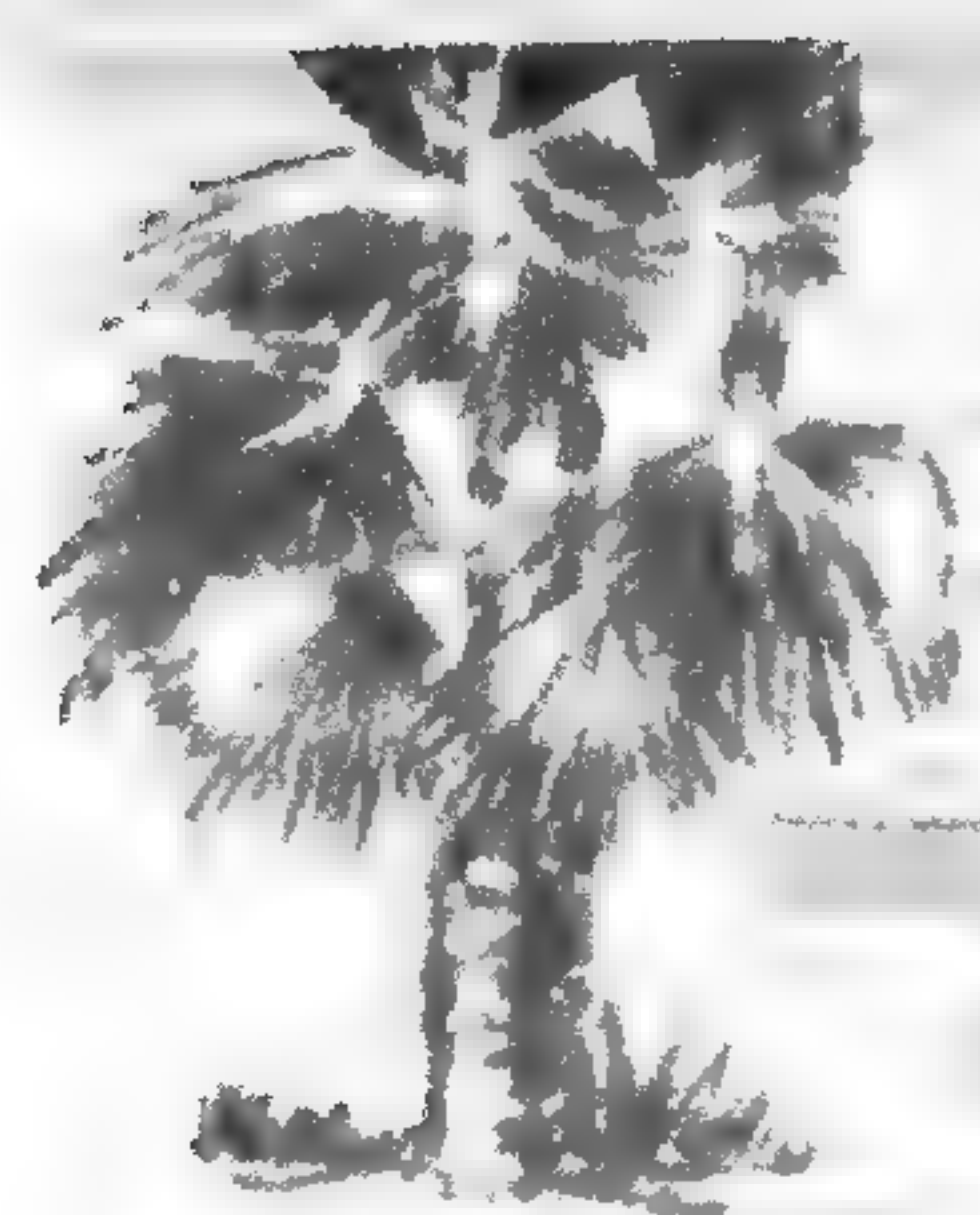


ARBORETUM TOURS

THE GUIDED TOUR OF THE ARBORETUM USUALLY REQUIRES AN HOUR AND FIFTEEN MINUTES. IT IS A COMBINATION OF A "JEEP TRAIN" TRIP THROUGH THE PLANT INTRODUCTIONS OF SHRUBS AND TREES FROM ALL OVER THE WORLD (ARRANGED ACCORDING TO GEOGRAPHIC AREAS) AND A WALKING TOUR THROUGH THE HISTORICAL SECTION OF THE ARBORETUM. IN THE HISTORICAL AREA CAN BE SEEN THE LAGOON WHICH FURNISHED WATER TO THE INDIANS; THE OLD ADOBE HOUSE OF THE EARLY (1839) SCOTCH PAISANO, HUGO REID AND HIS INDIAN WIFE, VICTORIA; E. J. "LUCKY" BALDWIN'S "QUEEN ANNE COTTAGE" AND CARRIAGE HOUSE -- ALL SET AMID THE BEAUTY OF TOWERING TREES, SOME OF THEM OVER A HUNDRED YEARS OLD. AFTER INSPECTING THESE MONUMENTS OF THE PAST WE MAY FOLLOW A JUNGLE TRAIL AT THE END OF WHICH OUR "JEEP TRAIN" WILL BE WAITING TO RETURN US TO THE ENTRANCE. THE NATURALIST GUIDE IS GLAD TO ANSWER QUESTIONS AT THE END OF THE TOUR.

THE NATURALIST GUIDE IS TELLING HIS GROUP OF SCHOOL CHILDREN THAT THE WILLIAM WOLFSKILL EUCALYPTUS (E. GLOBULUS) WAS PLANTED IN 1865 AND TODAY IS 185 FEET TALL. THIS TREE, ONE OF THE TALLEST OF ITS KIND IN SOUTHERN CALIFORNIA, STANDS AT THE ENTRANCE TO THE "QUEEN ANNE COTTAGE".





PALMS



ALOE S AFRICA



CAMBODIA BOTTLE BRUSH



BAMBOO
BUDDHA'S BELL



ROCK ROSE
CISTUS



ELEPHANT EARS JUNGLE



DAILY



HEART LEAF



KANGAROO PAW
W AUSTRALIA



BAWA S/A



PLATYCODON
CHINA



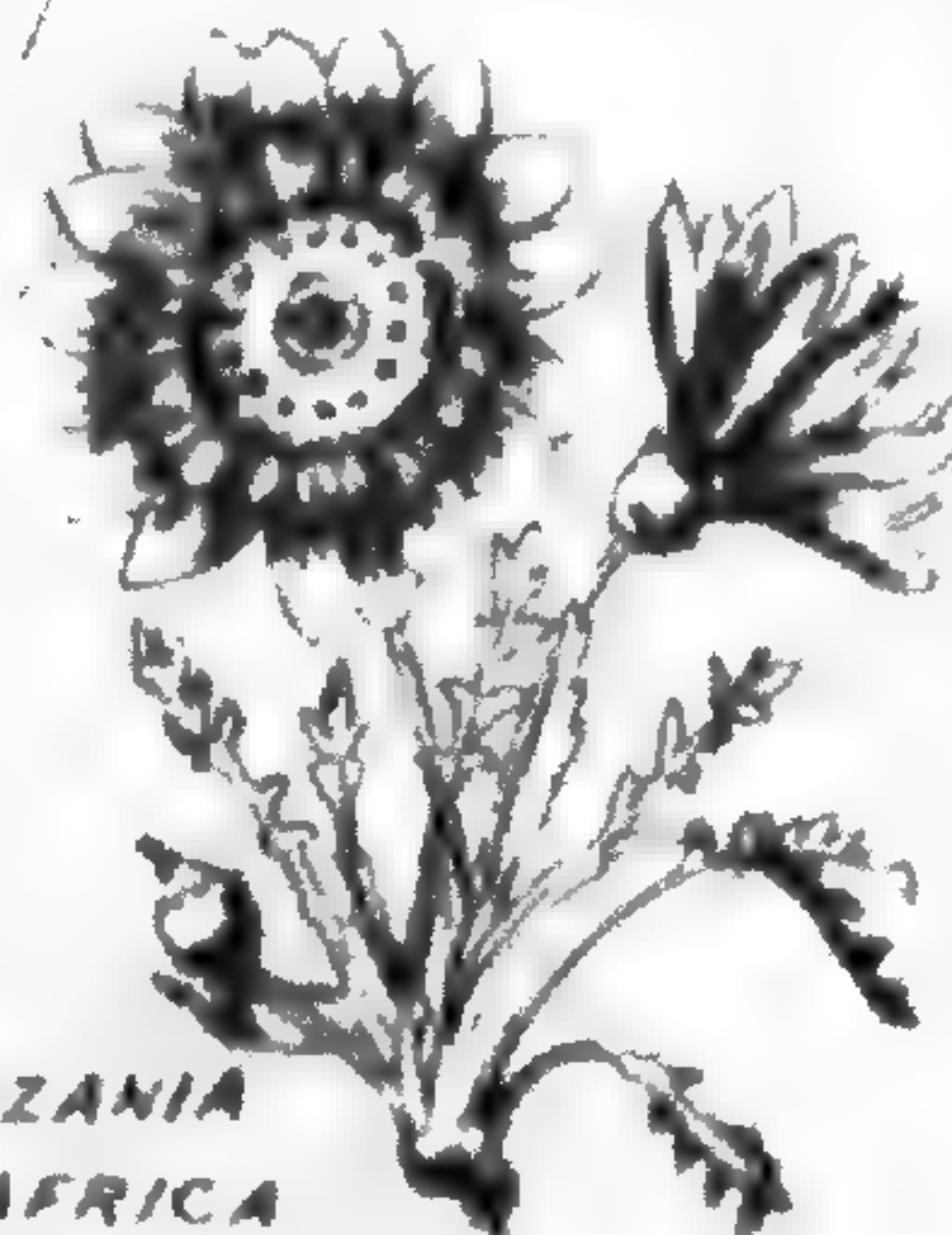
STURTS PEA
W AUSTRALIA



DRUNKEN STICK S. AMERICA



AGAPANTHUS S. AFRICA



GAZANIA
S. AFRICA



RED HOT POKER



DAUBENTONIA



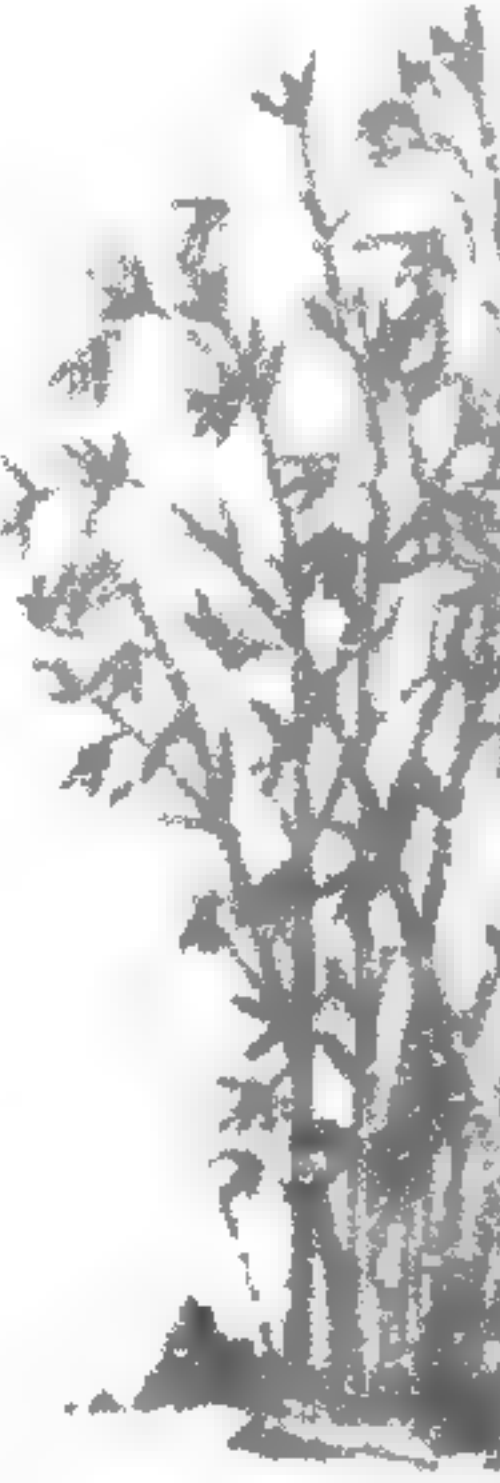
CHRYSANTHEMUM



FUYA



CORAL TREE



BAMBOO



DIGITALIS
HERB GARDEN

PLANTS SEEN BY
ARBORETUM VISITORS

MAIN
ENTRANCE

DAILY TOURS FOR SCHOOLS

CONDUCTED TOURS BY ARBORETUM NATURALISTS FOR EDUCATIONAL EXPERIENCE IN BOTANY, NATURE STUDY AND EARLY CALIFORNIA HISTORY AT THE LOS ANGELES STATE AND COUNTY ARBORETUM.

I. OBJECTIVES OF SUCH A FIELD TRIP.

- A. PLANT APPRECIATION AND THE INTRODUCTION TO THE VARIED WORLD OF PLANTS.
- B. TO SEE AND LEARN SOMETHING OF EARLY CALIFORNIA HISTORY IN THE FORM OF BUILDINGS, CONSTRUCTION MATERIALS, FURNISHINGS, AND HORTICULTURE.
- C. TO LEARN THE NATURE AND OBJECTIVES OF AN ARBORETUM.

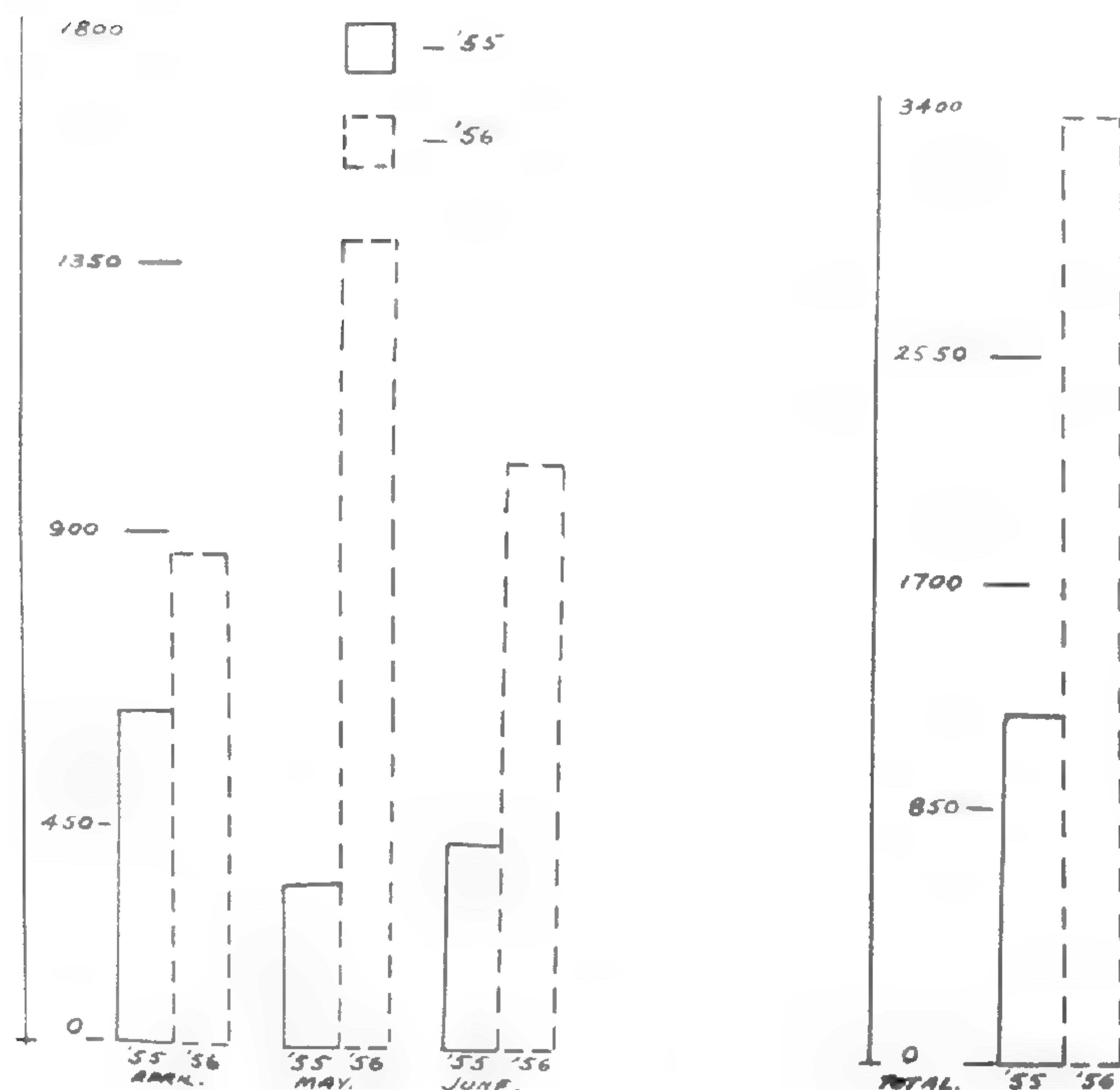
II. THE LEARNING EXPERIENCE.

- A. THE TRIP TO AND FROM THE ARBORETUM.
- B. TRAVEL ON A JEEP TRAIN AT THE ARBORETUM WHERE ONE SITS "OUT IN THE OPEN" SO TO SPEAK.
- C. TO SEE PLANTS NATIVE TO AUSTRALIA, SOUTH AMERICA, SOUTH AFRICA, AND MEDITERRANEAN AREAS.
- D. TO LEARN SOMETHING ABOUT PLANTS THROUGH TOUCH AND SMELL.
- E. TO SEE HOW A PLANT IS CULTIVATED FROM SEED TO MATURITY.
- F. TO EXPERIENCE THE CONTRIBUTION OF PLANTS TO CULTURE THROUGH FORM, COLOR, AND GROUPING.
- G. TO REALIZE THAT WE HAVE A VERY REAL AND VALUABLE HERITAGE FROM THE DAYS OF THE EARLY CALIFORNIA PIONEERS AND THAT WE MAY CONTINUE TO GUARD AND ADD OUR SHARE TO THIS HERITAGE.

III. AREAS OF LEARNING.

- | | |
|----------------------------|----------------------------------|
| A. PLANTS | F. GEOLOGY |
| B. PLANT PROPAGATION | G. BIRDS |
| C. PLANT IDENTIFICATION | H. CALIFORNIA HISTORY |
| D. PLANT ASSOCIATIONS | I. HORTICULTURAL EXPERIMENTATION |
| E. CONSTRUCTION OF GARDENS | J. JEEP TRAIN TOUR |

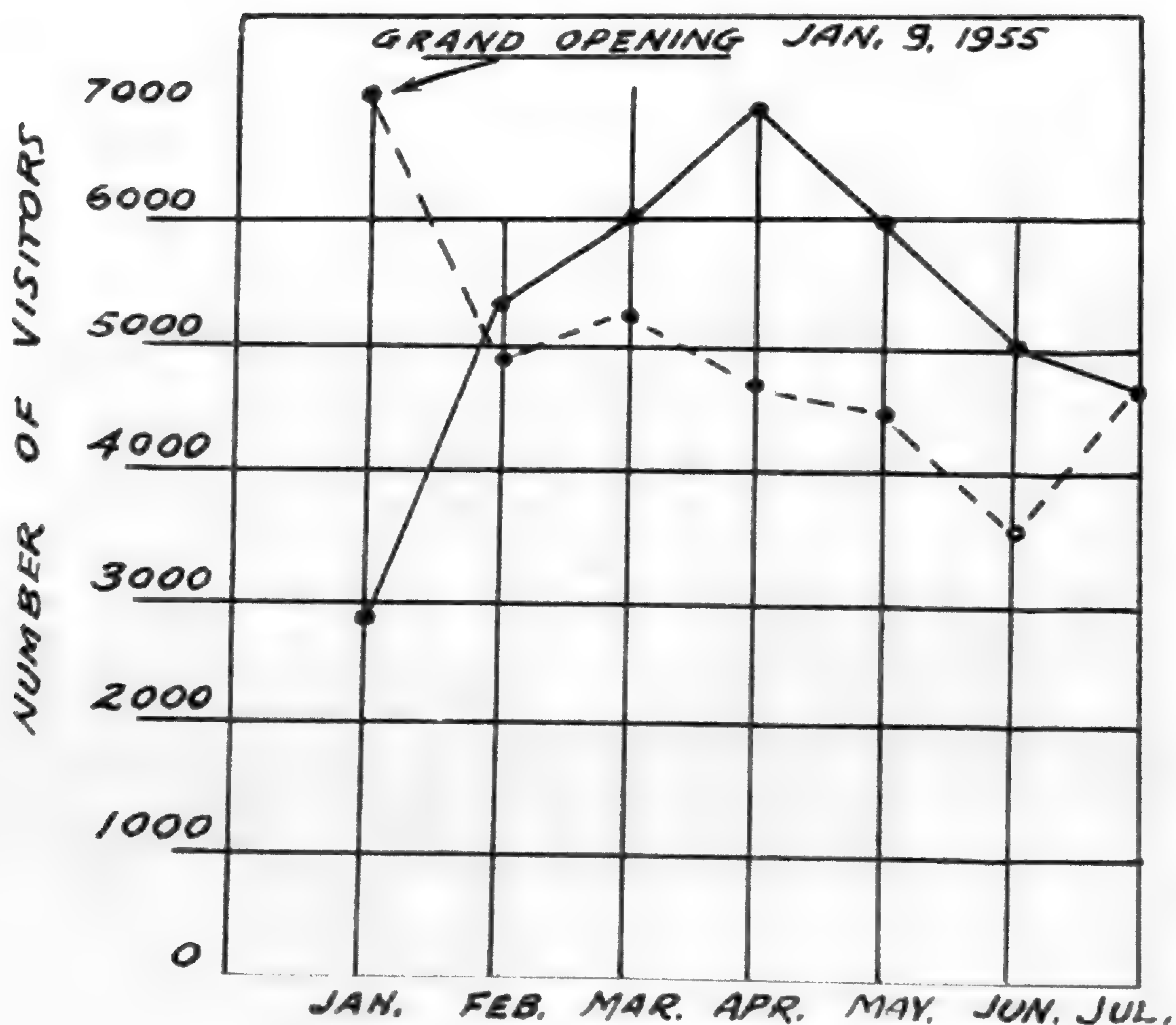
TOUR STATISTICS



YOUTH TOURS

THE FUTURE OF A CULTURE DEPENDS ON YOUTH. THIS IS ESPECIALLY TRUE IN THE WORLD OF PLANTS, WHERE IT REQUIRES ONE MAN'S LIFE TIME TO ACCOMPLISH A SMALL MEASURE OF PROGRESS. IT IS THE ARBORETUM'S DESIRE THAT AN INCREASING NUMBER OF CHILDREN WILL COME AND LEARN ABOUT PLANTS AND PLANT APPRECIATION EACH YEAR.

MONTHLY COMPARISON OF TOUR ATTENDANCE FOR 1955 & 1956 FROM JANUARY THROUGH JULY





STURT PEA, (CLIANTHUS SPECIOSUS) A VINE, WITH SCARLET FLOWERS, FOUND ON THE SAND DESERTS OF AUSTRALIA.

HORTICULTURE

THIS YEAR EXCELLENT PROGRESS WAS MADE IN THE OVER-ALL DEVELOPMENT OF THE ARBORETUM'S PLANTINGS. A LARGE MEASURE OF CREDIT FOR THIS PROGRESS IS DUE THE CHIEF HORTICULTURIST AND TO THE ACTIVE INTEREST OF THE ARBORETUM GARDENERS IN CHARGE OF THE VARIOUS SECTIONS.

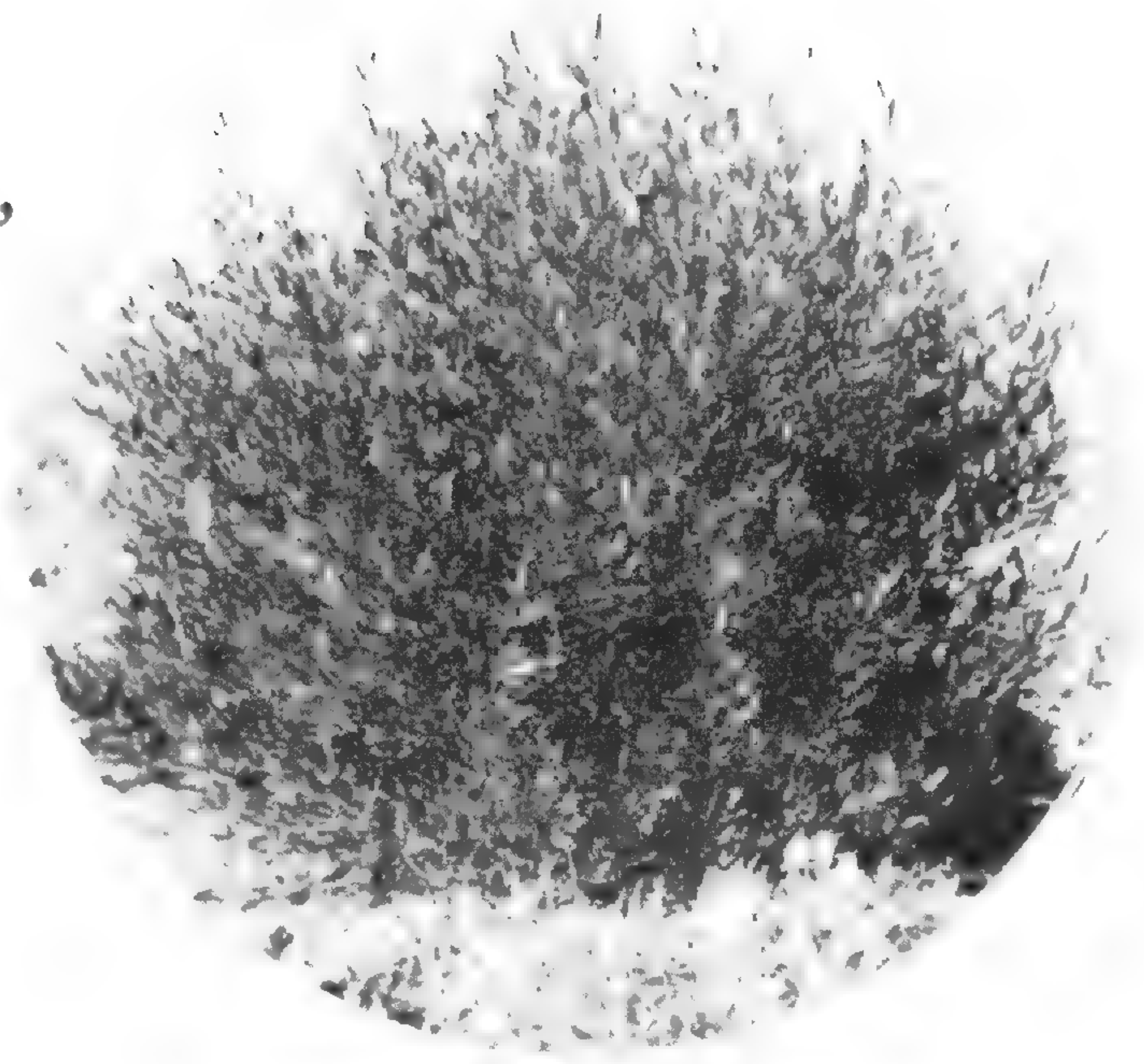
THE AUSTRALIAN SECTION: IN THIS SECTION, THE EUCALYPTUS COLLECTION PASSED THE 300 SPECIES MARK. ACACIA SPECIES NOW NUMBER 200. THE PLANTING OF THE KANGAROO PAWS (ANIGOZANTHOS) IS EXCEPTIONAL AND ATTRACTS MUCH COMMENT FROM VISITORS.

THE JUNGLE: WORK CONTINUES IN THIS SECTION WITH ADDITIONS TO THE EPIPHYTE PLANT GROUPING. THESE PLANTS, GROWING ON TREES, ARE LARGELY RESPONSIBLE FOR THE OVER-HEAD COLOR. MORE THAN 350 ORCHID AND BROMELIADS WILL BE PLANTED FOR THEIR COLOR CONTRIBUTIONS TO THIS SCENE.



THE KANGAROO PAW, (ANIGOZANTHOS MANGLESII), FROM AUSTRALIA WITH RED STEMS AND GREEN FLOWERS.

SOUTH AFRICA: EARLY IN THE YEAR, THE DAISY FAMILY, (COMPOSITAE), GROWING IN THE SOUTH AFRICAN SECTION WERE PLAGUED BY FUSARIUM FUNGUS. THIS FUNGUS KILLS PLANTS BY INFECTING THE ROOTS AND STEM. CONTROL OF FUSARIUM WAS EVENTUALLY ESTABLISHED AND EXTENSIVE PLANTING WAS THEN CARRIED OUT DURING THE REMAINDER OF THE YEAR. THE COLLECTIONS SO FAR IN THIS AREA REPRESENT SOME OF THE FINEST SPECIMENS OF SOUTH AFRICAN FLORA TO BE FOUND ANYWHERE ON THE WEST COAST.

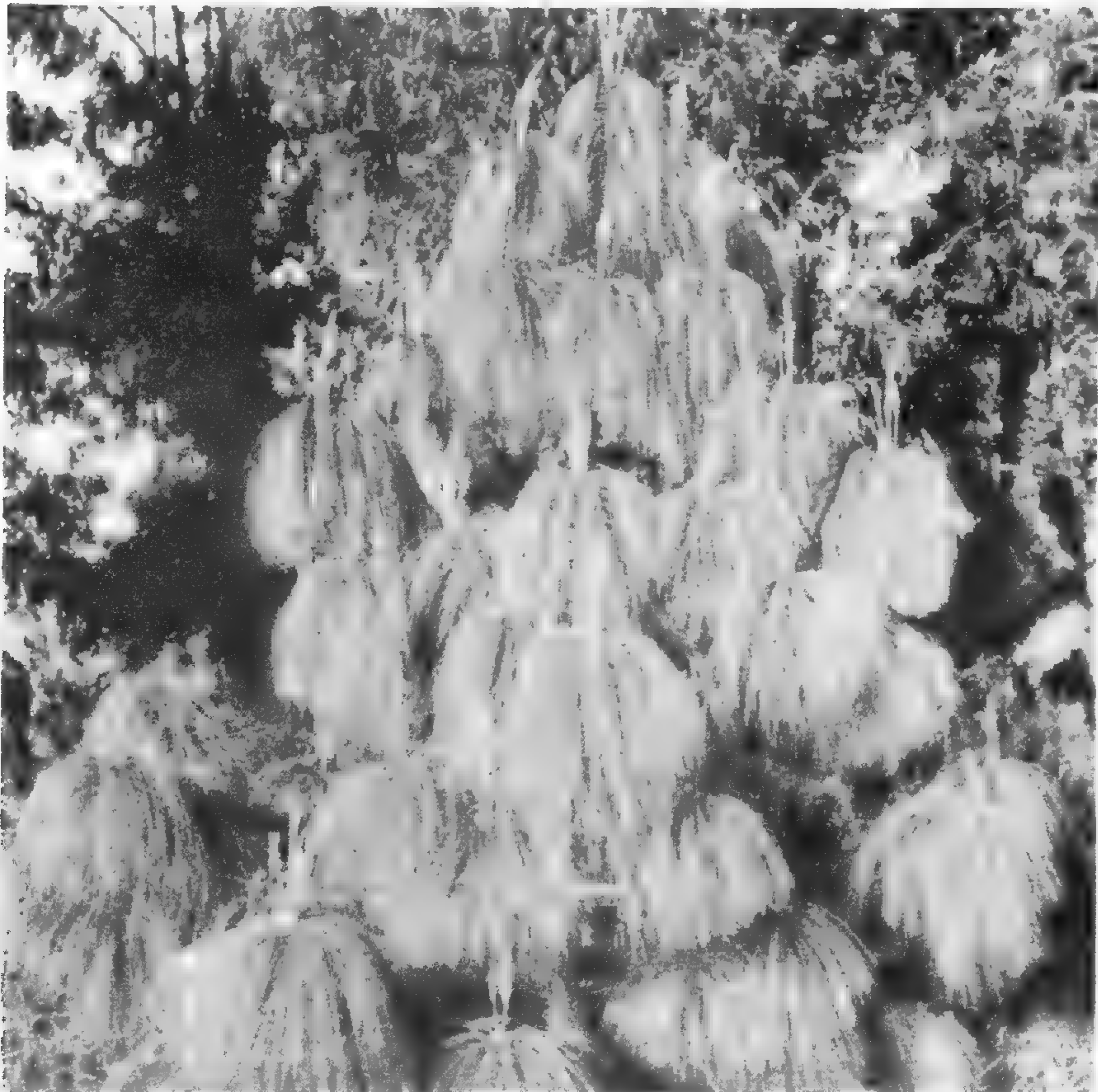


PURPLE HOP BUSH
(DODONAEA VISCOSA PURPUREA),
A REDDISH-PURPLE LEAVED SHRUB
FROM SOUTH AFRICA.

SOUTH AMERICA: TO THE SOUTH-WEST ACROSS THE ROAD FROM SOUTH AFRICA, IS THE SOUTH AMERICAN SECTION. NEW PLANTINGS HERE HAVE BEEN LIMITED THIS YEAR BY THE CONSTRUCTION OF THE FLOOD CONTROL DRAINAGE CHANNEL WHICH BISECTS THIS AREA.

DOMESTIC LANDSCAPE: THIS SECTION IS RAPIDLY REACHING MATURITY. IT IS NOW POSSIBLE TO SEE NEARLY MATURE SPECIMENS OF GROUND

COVERS. THE ARBORETUM'S COLLECTION OF PHILADELPHUS AND DEUTZIA ARE PLANTED IN THIS SECTION. THEY ARE OUTSTANDING FOR THEIR SPRING COLOR.



A HANDSOME MEMBER OF THE CONIFER FAMILY IS PINUS OOCARPA. A NATIVE OF MEXICO AND CENTRAL AMERICA, THIS TREE WITH PENDULOUS, LIGHT GREEN NEEDLES MAY BE SEEN IN THE DOMESTIC LANDSCAPE SECTION.



THE DIPPING WELL IN THE KITCHEN SECTION OF THE HERB GARDEN.

HERB GARDEN: ONCE AGAIN, THE HERB GARDEN IS OUTSTANDING FOR PROGRESS. THE CONTINUING CO-OPERATION AND INTEREST OF THE MEMBERS OF THE SOUTHERN CALIFORNIA UNIT OF THE HERB SOCIETY OF AMERICA IS A SOURCE OF NEVER ENDING PLEASURE TO ALL. PRESENT PLANS CALL FOR COMPLETION OF THIS GARDEN DURING THE COMING YEAR.

BALDWIN AVENUE ESPLANADE: ONE OF THE MOST EYE CATCHING PLANTINGS IN THE SAN GABRIEL VALLEY DURING MAY AND JUNE IS FOUND ALONG BOTH SIDES OF THE ARBORETUM'S BALDWIN AVENUE ESPLANADE. IT IS A DAZZLING DISPLAY OF A PINK, ROSE AND WHITE CARPET OF ICE PLANT (LAMPRANTHUS SIMILAR TO MESEMBRYANTHEMUM). THESE PLANTINGS ARE BEING EXTENDED TO FORM A SOLID RIBBON OF COLOR, MORE THAN 1000 FEET LONG, FROM COLORADO BOULEVARD SOUTH TO THE MAIN ENTRANCE OF THE ARBORETUM. CALIFORNIA LILACS (CEANOTHUS) AND VARIOUS SPECIES OF BOTTLEBRUSHES PLANTED BEHIND THIS BORDER, ADD MORE COLOR TO THIS DISPLAY.

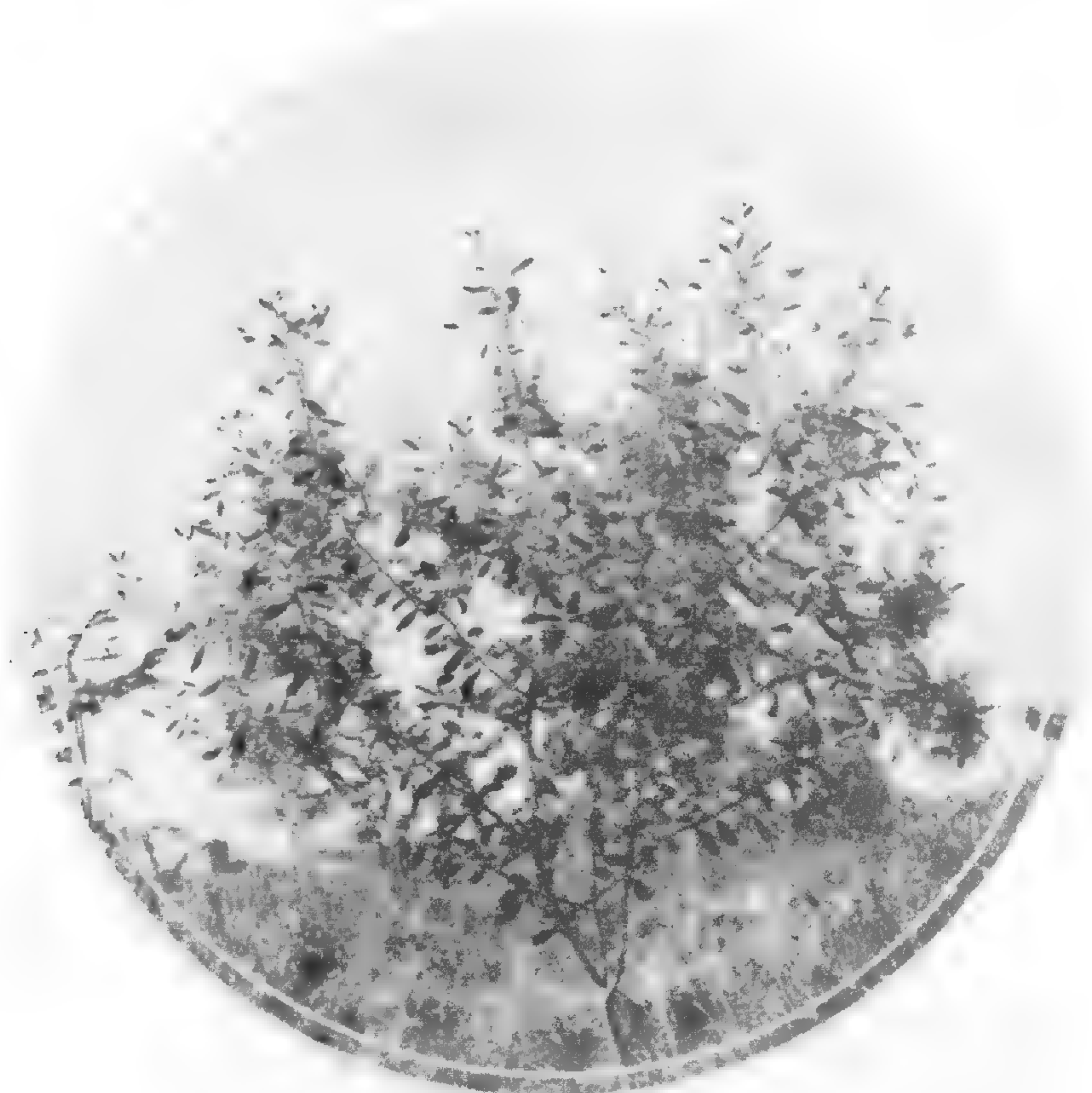


CENTER: BALDWIN AVENUE. BORDER: CLOSE VIEW OF ICE PLANT FLOWERS.

HISTORICAL SECTION: THE OLD FASHIONED ROSE GARDEN HAS BEEN STARTED WITH THE GENERAL OUTLINE ESTABLISHED AND A FEW OLD ROSE VARIETIES PLANTED. FURTHER DEVELOPMENT WILL DEPEND ON PRIVATE FUNDS AND THE INTEREST OF ROSE SPECIALIST GROUPS.

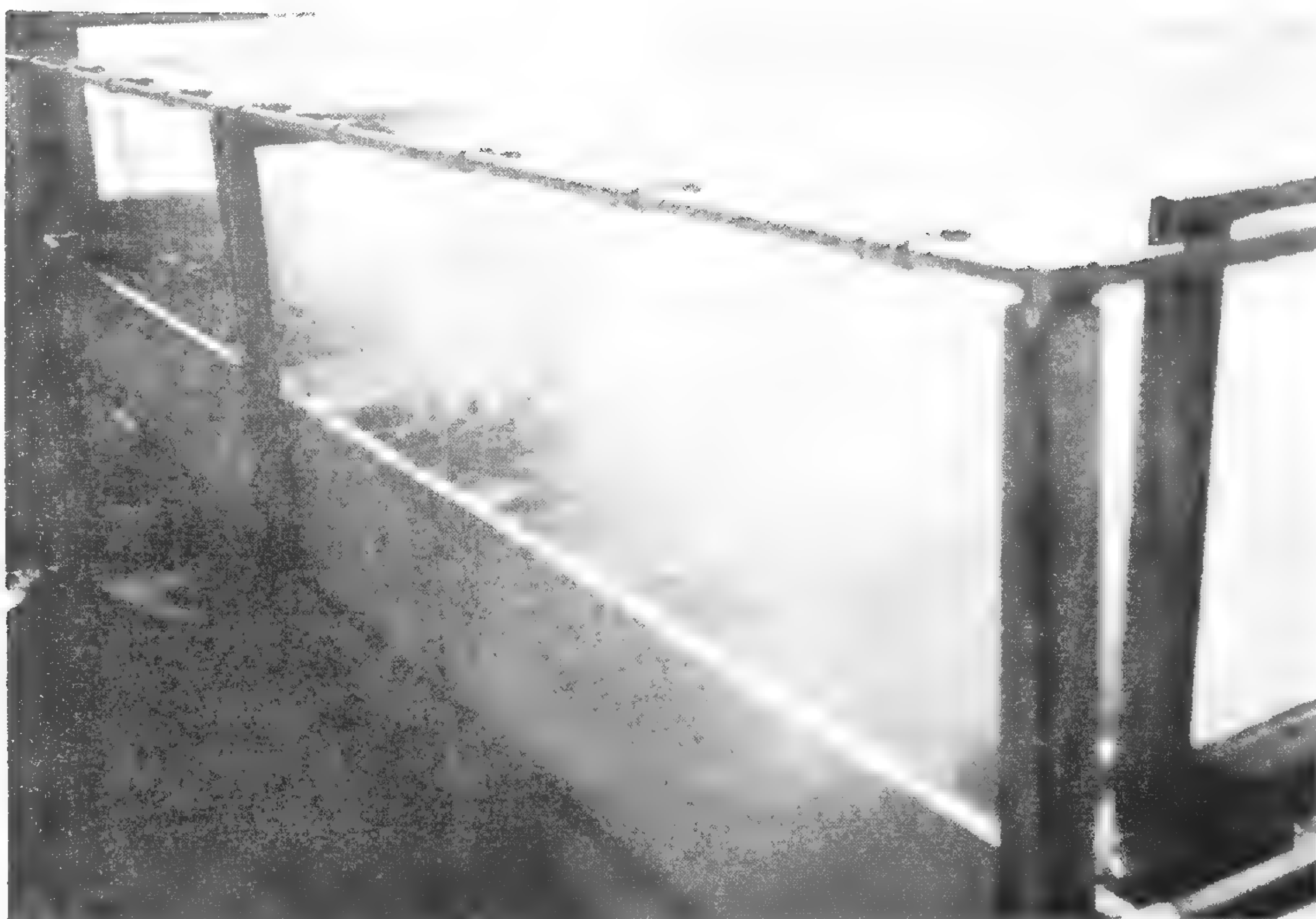
DISPLAY GARDEN: THE MOST RECENT SECTION, A TEST AND DISPLAY GARDEN, WAS INITIATED THIS SPRING. COLOR HERE IS ALREADY IN EVIDENCE AND THE FLOWERING OF SEVERAL HUNDRED NAMED GERANIUM SELECTIONS OF VARIED COLORS, WILL SOON BE ENJOYED. IN THE FALL, MORE THAN A 1000 CHRYSANTHEMUMS WILL BRING A BLAZE OF BRILLIANCE TO THIS AREA. THE BEDS CONTAINING THESE PERENNIALS ARE ARRANGED FOR CONVENIENT VIEWING. THE IDENTIFYING LABELS ARE READILY ACCESSIBLE FROM THE FOOTPATHS.

THE ANNUAL GROWTH OF ESTABLISHED PLANTINGS GIVES THE ARBORETUM THE LOOK AND FEEL OF APPROACHING MATURITY. IT HAS BEEN A YEAR OF ACCOMPLISHMENT IN THE DEVELOPMENT OF THE ARBORETUM GROUNDS. THE MAINTENANCE STAFF IS DESERVING OF THE FULLEST PRAISE.



ACACIA STEEDMANII. A NATIVE OF AUSTRALIA. BRIGHT YELLOW FLOWERS, SPATULA LIKE LEAVES AND PINK BARK.

PLANT PROPAGATION



NEW PROPAGATION "FOGGER".

CERTAIN DIFFICULT TO PROPAGATE PLANT MATERIAL CAN BE ROOTED EASILY WHEN CUTTINGS ARE PLACED IN A VERY MOIST ATMOSPHERE. THE RECENTLY CONSTRUCTED OPEN-AIR "FOGGER" PROVIDES A FINE MIST LIKE SPRAY, BATHING THE ENTIRE CUTTING IN A FILM OF MOISTURE.

FOGGER IN OPERATION, CUTTINGS BATHED IN A FINE MIST.

POLYETHYLENE PLASTIC.

THE USE OF POLYETHYLENE SHEETING TO COVER COLDFRAMES HAS BEEN INCREASED. MANY TYPES OF PLANT CUTTINGS ARE NOW BEING ROOTED BY THIS TECHNIQUE. THIS SAME PLASTIC IN THE FORM OF BAGS HAS BEEN USED FOR STRATIFYING SEEDS, WHICH REQUIRE BOTH WARM AND COLD PERIODS FOR BREAKING DORMANCY, THUS HASTENING THEIR GERMINATION.

OUR ORCHID COLLECTION.

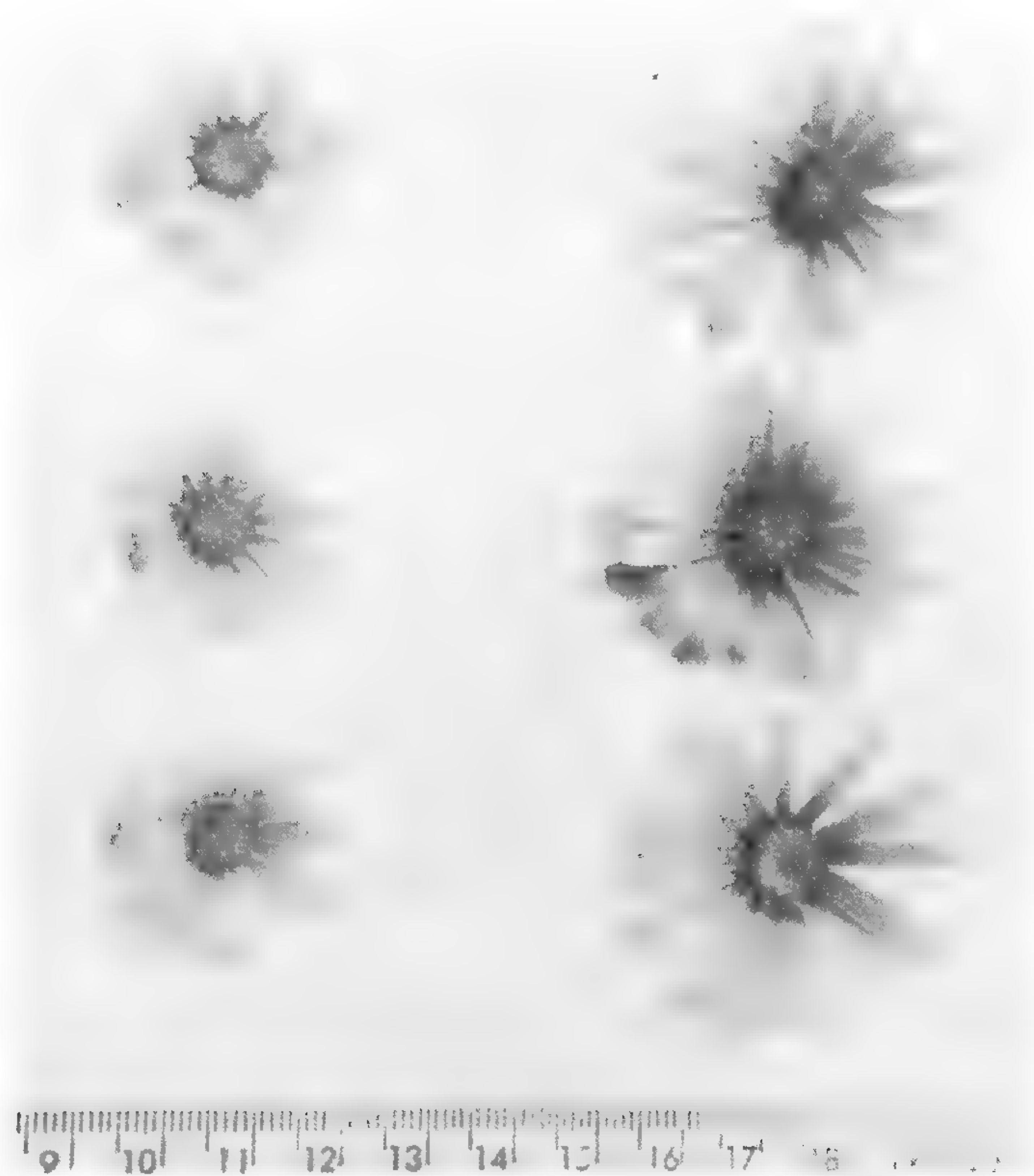
THE ARBORETUM NOW HAS ONE OF THE FINEST COLLECTIONS OF LADY SLIPPER ORCHIDS (CYPRIPEDIUM). THE TOTAL COLLECTION OF ALL TYPES OF ORCHIDS NUMBERS APPROXIMATELY 2100 ACCESSIONS: REPRESENTATIVES OF THE GROUPS CYMBIDIUM AND CATTLEYA ARE AMONG THIS COLLECTION. A SPECIAL DISPLAY GREENHOUSE FOR THE ORCHIDS WILL SOON BE UNDER CONSTRUCTION, FINANCED BY PRIVATE FUNDS.

REPRESENTATIVE BLOOMS OF:
CYPRIPEDIUM ROSY DAWN; C. MAUDIAE; C. LAWRENCEANUM COLORATUM; C. HELLASWEST; C. MILMOORE.



A PLANT REGULATOR

THE CHEMICAL, COLCHICINE, A PLANT BY-PRODUCT, IS OFTEN USED TO INCREASE THE NUMBER OF CHROMOSOMES (HERIDITARY CARRIERS) WITHIN PLANTS. THIS INCREASE IN THE NUMBER OF CHROMOSOMES IS TERMED POLYPLOIDY. THE RESULT OF SUCH A CHEMICAL TREATMENT IS SOMETIMES EXPRESSED IN LARGER PLANTS, AS LARGER LEAVES, LARGER FLOWERS OR OFTEN A COMBINATION OF THESE CHARACTERS. THE BLUE MARGUERITE DAISY, (FELICIA AMELOIDES) TREATED WITH COLCHICINE BY THE PLANT PROPAGATOR HAS BEEN INDUCED TO INCREASE ITS CHROMOSOME NUMBER, PRODUCING FLOWERS NEARLY TWICE THE SIZE OF THE ORIGINAL PARENT FLOWER. A NATIVE OF SOUTH AFRICA, THIS NEW LARGER FLOWER DAISY HAS BEEN NAMED FELICIA 'SANTA ANITA' AND WILL SOON BE RELEASED FOR FURTHER PROPAGATION AND SALE TO THE GENERAL PUBLIC.



FELICIA AMELOIDES, BLUE DAISY OR AGATHEA. LEFT, THE ORDINARY FLOWER SIZE. RIGHT, THE COLCHICINE TREATED, LARGER FLOWER 'SANTA ANITA'.

PLANT AND WEATHER RECORDS

SURPLUS SEEDS AND PLANTS.

AS DURING PREVIOUS YEARS, SURPLUS SEED AND PLANTS WERE DISTRIBUTED TO VARIOUS ARBORETA, BOTANICAL GARDENS, COUNTY, STATE AND GOVERNMENT INSTITUTIONS, NURSERIES AND INDIVIDUALS ON THE USUAL EXCHANGE BASIS. A GREAT MANY OF OUR SURPLUS PLANTS WERE GIVEN TO LOS ANGELES COUNTY INSTITUTIONS FOR LANDSCAPING PURPOSES, SUCH AS:

LOS ANGELES COUNTY SHERIFF'S "WAYSIDE HONOR RANCHO"
LOS ANGELES COUNTY "OAK GROVE BOYS CAMP"
LOS ANGELES COUNTY "LONG BEACH HOSPITAL"
LOS ANGELES COUNTY "MUSEUM"
CITY OF LOS ANGELES PARKS DEPARTMENT
CITY OF ARCADIA SCHOOLS
EAST LOS ANGELES COLLEGE
LONG BEACH STATE COLLEGE
CITY OF PASADENA PARKS DEPARTMENT.

WEATHER.

WEATHER INFORMATION CONTINUES TO BE OF VALUABLE ASSISTANCE TO THE ARBORETUM IN REGARDS TO THE CARE OF PLANTS AND MOST SUITABLE SEASON FOR PLANTING OR CARE OF SOIL.

IN ADDITION, THIS INFORMATION IS PROVING OF VALUE TO THE GENERAL PUBLIC IN THE AREA. FREQUENT TELEPHONE CALLS FROM INDIVIDUALS, CITY HALLS, AND NEWSPAPERS IN THE SAN GABRIEL VALLEY, ARE RECEIVED CONCERNING THE TEMPERATURE, RAINFALL OR DEGREE OF DRYNESS. AT PRESENT THE DAILY HIGH AND LOW TEMPERATURE, EVAPORATION AND RAINFALL IS PUBLISHED TWICE WEEKLY IN THE LOCAL NEWSPAPER THE ARCADIA TRIBUNE.

A MONTHLY REPORT OF DAILY WEATHER RECORDS IS FORWARDED TO THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT.

THE CITY OF ARCADIA WATER DEPARTMENT IS GIVEN A TELEPHONE REPORT OF DAILY MEASUREMENTS WHICH AIDS THAT DEPARTMENT IN DETERMINING ANTICIPATED WATER CONSUMPTION AND PUMP-TIME OPERATION.

THESE SERVICES ARE AVAILABLE TO OTHER CITIES OR INDIVIDUALS UPON REQUEST.

PLANT RECORDS

1953 - 54

2,168

ACCESSION
NEW PLANTS

1954 - 55

2,276

1955 - 56

2,886



SEEDS PLANTED
1184



CUTTINGS
2,633



4,605 PLANTS
MOVED TO GALLON
CANS



11,735 PLANTS MOVED
TO PERMANENT FIELDS
LOCATIONS



SEED
AND
PLANT
EXCHANGE



SEEDS

REC'D 653 PKGS SENT 215 PKGS.
REC'D 379 PKGS SENT 256 PKGS.



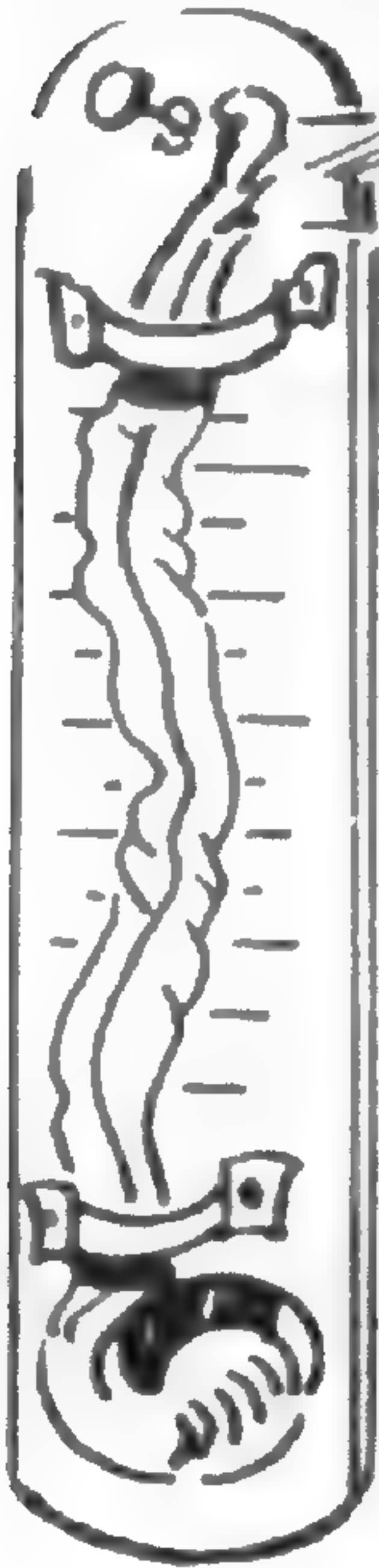
FOREIGN - REC'D 22 SENT-0
DOMESTIC REC'D 1832 SENT-3863

WEATHER



RAINFALL 18.67 INCHES
IN 29 DAYS 1955-56

TEMPERATURE



114
106

RECORD HIGH
SEVEN DAYS

100

THIRTEEN DAYS ABOVE

90

SEVENTY NINE ABOVE

40

32

30

RECORD LOW



9.59 INCHES IN ONE
STORM
1955-56

PLANT RECORDER T. MCGAH
RECORDING LOSE OF
WATER THROUGH
EVAPORATION



RESEARCH

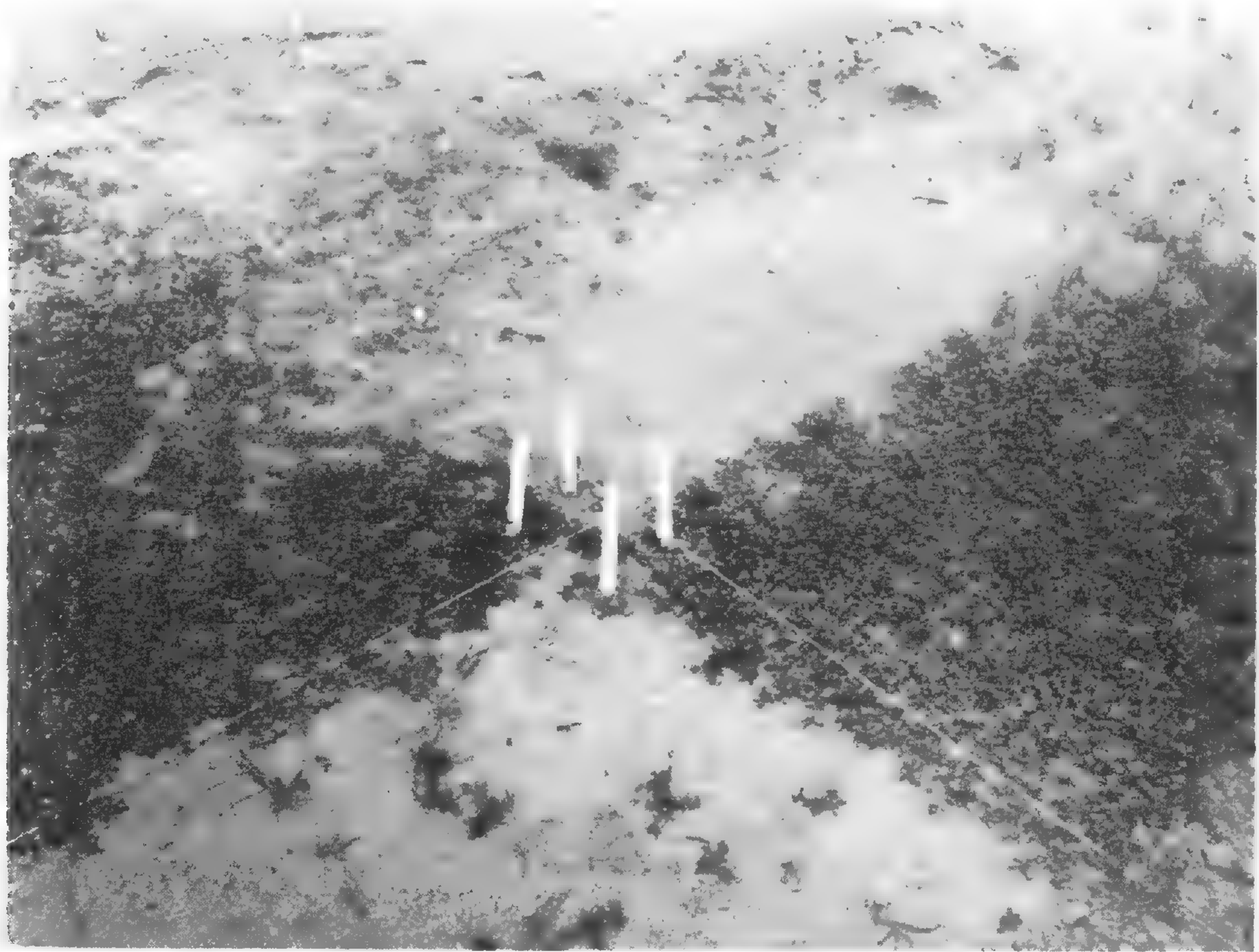
THE ARBORETUM RESEARCH PROGRAM CONTINUES TO BE DIRECTED TOWARD FINDING PRACTICAL SOLUTIONS TO SOME OF THE HORTICULTURAL PROBLEMS FACING THE HOME OWNER IN SOUTHERN CALIFORNIA.

URAMITE: A MIXTURE OF METHYLENE UREAS, IS A NEW FERTILIZER CONTAINING 38% NITROGEN. SLOW TO DISSOLVE, THE NITROGEN IS RELEASED FOR PLANT USE OVER A LONG PERIOD. IT MAY BE POSSIBLE WITH THIS NEW FERTILIZER TO ADD PLANT FOOD TO A LAWN JUST ONCE A YEAR, OBTAINING A GREEN AND HEALTHY TURF FOR THE WHOLE YEAR. IN COMPARISON TESTS WITH OTHER COMMERCIAL FERTILIZERS, URAMITE MAINTAINED TURF GREENNESS LONGER THAN THE OTHER FORMULATIONS.



FERTILIZER TEST ON U-3 BERMUDA TURF. LEFT PANEL: URAMITE. CENTER PANEL: 8-8-4 NKP FORMULA. RIGHT PANEL: URAMITE. LEFT AND CENTER PANEL NITROGEN APPLIED AT 1 POUND PER 100 SQ. FT.

NEBURON: A NEW HERBICIDE WHICH HAS BEEN UNDER TEST AT THE ARBORETUM. EXPERIMENTAL WORK ELSEWHERE HAS SHOWN THIS COMPOUND TO COMPLETELY CONTROL CRABGRASS AND CHICKWEED IN TURF WITH NO INJURY TO ESTABLISHED TURF. THE RESULTS OF THE ARBORETUM TEST PLOTS CAN BE SEEN IN THE ACCOMPANYING PHOTOGRAPH. CONTROL OF PURSLAND, A COMMON WEED, WAS CONSIDERED COMPLETE, HOWEVER, NO CONTROL WAS GAINED OVER BARNYARD GRASS. WEED ERADICATION AT THE ARBORETUM CONTINUES TO BE A SERIOUS PROBLEM, ESPECIALLY NEAR GROWING PLANT SPECIMENS.



NEBURON TEST. LEFT AND RIGHT TRIANGLES ARE UNTREATED CONTROL PLOTS SHOWING PURSLANE IN ABUNDANCE. TOP TRIANGLE TREATED WITH NEBURON AT THE RATE OF 16 POUNDS PER ACRE. BOTTOM TRIANGLE TREATED WITH NEBURON AT THE RATE OF 2 POUNDS PER ACRE.

PHYGON XL: THE ARBORETUM LAGOON IS COVERED BY VARIOUS ALGAE DURING THE SUMMER MONTHS. A FUNGICIDAL CHEMICAL, PHYGON XL, HAS RECENTLY SHOWN PROPERTIES EFFECTIVE IN THE CONTROL OF CERTAIN ALGAE AND AQUATIC WEEDS. TESTS AT THE ARBORETUM WITH A SMALL CONCENTRATION OF THIS CHEMICAL RESULTED IN DEATH OF THE TREATED ALGAE. LARGE SCALE TRIALS, USING GREATER AMOUNTS OF PHYGON XL, CONTROLLED THE ALGAE OVER THE ENTIRE SURFACE OF THE LAGOON. A NEWS RELEASE ON THIS WORK RESULTED IN NUMEROUS INQUIRIES BY THE PUBLIC.

CISTUS EXPERIMENTATION

STARTED SEVERAL YEARS AGO, OUR INTEREST CONTINUES IN CISTUS OR ROCK ROSE AS AN EROSION CONTROL PLANT FOR SOUTHERN CALIFORNIA FOOTHILL PLANTINGS. CERTAIN SPECIES EXHIBIT SOME RESISTANCE TO BURNING AND SEEDS GERMINATE QUICKLY FOLLOWING A FIRE. THE ARBORETUM, IN COOPERATION WITH THE UNITED STATES FOREST SERVICE, HAS MANY TEST PLANTINGS OF CISTUS ON THE SLOPES OF THE NEARBY MOUNTAINS. RECENTLY, AN INHIBITOR TO GERMINATION, SOME TYPE OF CHEMICAL, HAS BEEN DISCOVERED ASSOCIATED WITH THE SEED OF CISTUS. THE IDENTIFICATION OF THE CHEMICAL NATURE OF THE INHIBITOR AND WAYS TO EFFECTIVELY ELIMINATE ITS ACTION IN THE FIELD ARE PROJECTS FOR FURTHER INVESTIGATIONS WITH THIS MOST INTERESTING PLANT.



THE ROWS OF DARK PLANTS ARE VARIETIES OF CISTUS PLANTED AS 12" SEEDLINGS TWO YEARS AGO. SOME OF THE PLANTS ARE IN BLOOM. THIS IS A TEST PLANTING ON THE SOUTH SLOPE OF LANNON CANYON EARTH FLOOD CONTROL DAM, OPERATED BY THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT.

RESEARCH -- AIR POLLUTION

1. LOS ANGELES STATE & COUNTY ARBORETUM -- OBSERVATION ON SEED AND NUMEROUS ORNAMENTALS.
2. AIR POLLUTION CONTROL DISTRICT, COUNTY OF LOS ANGELES.
3. UNIVERSITY OF CALIFORNIA, CITRUS EXPERIMENT STATION, RIVERSIDE.

AIR POLLUTION CONTROL DISTRICT COUNTY OF LOS ANGELES RESEARCH DIVISION

IN APRIL OF 1955, THE PLANT SECTION OF THE LOS ANGELES COUNTY AIR POLLUTION CONTROL DISTRICT WAS AUTHORIZED TO ERECT A GREENHOUSE ON THE GROUNDS OF THE LOS ANGELES STATE AND COUNTY ARBORETUM. THE GREENHOUSE IS MECHANIZED SO THAT TEMPERATURE, HUMIDITY, NUTRITION, WATER AND LIGHT DO NOT DEVIATE FROM DAY TO DAY. THIS IS A RESEARCH AND AIR MONITORING ACTIVITY OF THE DISTRICT IN WHICH ANNUAL BLUEGRASS (POA ANNUA) AND OTHER PLANT MATERIALS ARE BEING GROWN FOR USE IN THE DETECTION OF POLLUTANTS IN BOTH THE FIELD AND IN THE LABORATORY.



FAR LEFT: SMALL TEST BOX (SEE TEST). GREENHOUSE PROTECTED FROM THE INTENSE SUMMER SUN BY LATH AND CLOTH SCREENS.

APPROXIMATELY 15 TEST BOXES ARE LOCATED AT WIDELY SEPARATED POINTS IN LOS ANGELES COUNTY AND ONE IN ORANGE COUNTY. ONE TEST BOX, LOCATED AT THE ARBORETUM, IS USED FOR ROUTINE MEASUREMENT. A SECOND IS FOR RESEARCH ON THE SUSCEPTIBILITY OF VARIOUS PLANTS. THE BOXES ARE SO DESIGNED THAT NORMAL ATMOSPHERIC CONDITIONS AND FILTERED AIR (POLLUTANTS REMOVED BY ACTIVATED CHARCOAL) CAN BE TESTED SIMULTANEOUSLY, USING PLANTS AS INDICATORS. SMOG PRODUCES LIGHT BROWN OR TAN COLORED BANDS ON GRASS, THE LENGTH OF WHICH IS AN INDICATION OF THE INTENSITY OF THE POLLUTANT. A DAILY PICTURE OF THE AIR POLLUTION IN DIFFERENT PARTS OF THE COUNTY IS OBTAINED. THIS IS STUDIED IN CONNECTION WITH CHEMICAL ANALYSES OF THE AIR AND METEOROLOGICAL CONDITIONS.

SPACE FOR FIELD PLOTS HAS ALSO BEEN ALLOTTED WHERE VEGETABLES HAVE BEEN GROWN IN ORDER TO FIND OUT WHICH ARE THE MORE SMOG RESISTANT VARIETIES.

THE LOCATION OF THIS PROJECT HAS RESULTED IN SUBSTANTIAL SAVINGS IN TIME AND MONEY. MANY ITEMS WOULD OTHERWISE HAVE TO BE BOUGHT IN DUPLICATE, E.G., HOSES, WEEDERS, SPRAY GUNS, MECHANICAL TOOLS, ETC.

THE ARBORETUM STAFF, WHICH IS ON DUTY OVER WEEKENDS, HAS PROVIDED VALUED HELP BY CHANGING TEST PLANTS AND CHECKING THE GREENHOUSE CONTROLS ON WEEKENDS. THIS TAKES ONLY A FEW MINUTES' TIME, BUT THIS TASK REQUIRES PEOPLE WITH JUDGMENT AND TECHNICAL KNOWLEDGE.

THE GREAT NUMBER OF SPECIES OF PLANTS GROWN IN THE ARBORETUM'S OWN GREENHOUSES HAS PROVIDED AN OPPORTUNITY FOR THE AIR POLLUTION CONTROL DISTRICT PEOPLE TO OBSERVE THEIR RESISTANCE OR SUSCEPTIBILITY TO SMOG. THE PURSUANCE OF AIR POLLUTION STUDIES BY THE RIVERSIDE CITRUS EXPERIMENT STATION'S GROUP ON NEIGHBORING GROUND, HAS PROVIDED BOTH GROUPS WITH AN OPPORTUNITY TO EXCHANGE INFORMATION AND EXPERIENCE.

UNIVERSITY OF CALIFORNIA,
CITRUS EXPERIMENT STATION,
RIVERSIDE, CALIFORNIA.

THIS IS THE SECOND RESEARCH AGENCY CONDUCTING STUDIES AT THE ARBORETUM ON THE EFFECT OF AIR POLLUTION (SMOG) ON PLANTS. UNDER THE DIRECTION OF DR. O. C. TAYLOR, DEPARTMENT OF HORTICULTURE, THEY ARE STUDYING CITRUS, AVOCADO, MACADAMIA, --- ALL TREE CROPS; AND BEANS, A FIELD CROP.

RESEARCH WAS INITIATED HERE IN THE FALL OF 1956 AND AS A RESULT AN EFFECT OF NATURAL AIR POLLUTANTS IN LOS ANGELES COUNTY WAS DEMONSTRATED FOR THE FIRST TIME ON CITRUS. THE DAMAGE SYMPTOMS ON GRAPEFRUIT TREES WERE AN INCREASED AMOUNT OF LEAF DROP AS WELL AS A BRONZING OF THE FULLY EXPANDED LEAVES REMAINING ON THE TREE.

ON THE BASIS OF THE SUCCESS OF THE FIRST TRIALS, THIS WORK HAS BEEN EXPANDED AND TWO LARGE AIR TIGHT GLASSHOUSE TYPE ENCLOSURES, AS SEEN IN THE ILLUSTRATION, HAVE BEEN CONSTRUCTED AT THE ARBORETUM BY THE EXPERIMENT

STATION. BOTH HOUSES HAVE FORCED AIR VENTILATION BUT IN ONE THE SMOG IS REMOVED BY CARBON FILTERS WHILE THE OTHER RECEIVES NON-FILTERED AIR.



THE PLANTS MENTIONED ABOVE ARE NOW BEING STUDIED IN THESE FACILITIES NOT ONLY TO LEARN OF ALL POSSIBLE DETRIMENTAL EFFECTS OF SMOG ON THEIR GROWTH AND PRODUCTION, BUT ALSO HOW TO MINIMIZE THESE EFFECTS. THIS STUDY IS OF DIRECT VALUE TO THE AGRICULTURE OF LOS ANGELES COUNTY.

EDUCATION

AN IMPORTANT OBJECTIVE OF THE ARBORETUM IS TO INSTRUCT ITS VISITORS, NOT ONLY IN THE NEWNESS OR UNIQUE QUALITY OF GROWING PLANT SPECIMENS, BUT TO PROVIDE INSTRUCTION IN BOTANY, HORTICULTURE AND NATURAL HISTORY FOR AN APPRECIATION AND UNDERSTANDING OF THE PLANT WORLD.

THIS SPRING, THE ARBORETUM BEGAN ITS EDUCATION PROGRAM ON A PRELIMINARY BASIS IN OFFERING FOUR CLASSES. THE FOLLOWING COURSES ANSWERED THE PUBLIC NEED AS INDICATED BY THE FREQUENCY OF REQUESTS:

- | | |
|------------------------|--|
| A. TREE BADGE | GIRL SCOUT TROOPS WERE GIVEN A SERIES OF TEN LECTURES AND DEMONSTRATIONS IN IDENTIFICATION, PROPAGATION AND CONSERVATIONS OF TREES. THIS CLASS TERMINATED IN AN ARBOR DAY PROGRAM CONDUCTED AT THE ARBORETUM AND THE SIX ELEMENTARY SCHOOLS OF ARCADIA BY THE GIRL SCOUTS. |
| B. LEADERS' COURSE | MEETING WEEKLY FROM 7 - 9 P.M. FOR TEN SESSIONS. PLANNED FOR ADULT LEADERS ACTIVE IN BOY AND GIRL SCOUTS AND OTHER YOUTH GROUP PROGRAMS. INSTRUCTION AND DEMONSTRATION INCLUDED BOTANY, ENTOMOLOGY, ORNITHOLOGY AND NATURE STUDY. |
| C. PLANT LORE CLUB | A GROUP OF SPECIALLY INTERESTED 7TH AND 8TH GRADE BOYS AND GIRLS. A NATURE STUDY COURSE CENTERED AROUND PLANTS. |
| D. BOTANICAL SKETCHING | PENCIL SKETCHING TO LEARN FORM, SHAPE AND PERSPECTIVE USING LIVING PLANT MATERIAL AS MODELS. A BRIEF BOTANICAL LECTURE BEGAN EACH CLASS SESSION. |

THE SUMMER SESSIONS ALSO CENTERED AROUND FOUR CLASSES. LARGER CLASS SIZES WERE ATTEMPTED AND MORE PUBLIC NOTICE WAS GIVEN CONCERNING THE COURSES BEING OFFERED:

- | | |
|----------------------------------|---|
| A. NATURE LORE: | CHILDREN 9 - 11 YEARS OLD. |
| B. TREE IDENTIFICATION: | BOY AND GIRL SCOUTS AND ADULTS. |
| C. CULTIVATION AND USE OF HERBS: | ADULTS. HERB SOCIETY CONDUCTED. |
| D. BOTANICAL SKETCHING: | A REPEAT CLASS OF THE TYPE GIVEN IN THE SPRING. |
| E. BIRD WALKS: | 1ST AND 3RD SUNDAYS - 8:00 - 10:00 A.M. THESE EARLY MORNING TRIPS WERE ATTENDED BY CHILDREN AND ADULTS ALIKE. |

ALL CLASSES WERE CONDUCTED OUTDOORS, MAKING LECTURE MATERIALS READILY ACCESSABLE TO THE STUDENTS AND AT THE SAME TIME STIMULATING CLASS INTEREST IN A WAY NEVER APPROACHED IN THE USUAL CLASSROOM COURSES.

CLASS ACTIVITIES



GIRL SCOUTS PLANTING SEEDS.
ONE PHASE IN THE PURSUIT OF
THEIR TREE MERIT BADGE.



BIRD WATCHERS
WATCHING BIRDS WORK.

BOTANICAL SKETCHERS
MEASURE FOR PERSPECTIVE.





AFTER A FORMAL CLASS LECTURE ON HERBS,
THEIR USES, HISTORY OR LORE; THE
CLASS MEMBERS WALK TO THE HERB
GARDEN TO SEE LIVING HERB
SPECIMENS.



THE ARBORETUM LIBRARY

A LIBRARY IS THE HEART OF ANY INSTITUTION ENGAGED IN RESEARCH AND EDUCATION. IT HOLDS THE KNOWLEDGE GAINED FROM PAST ENDEAVORS AND IS THE SOURCE OF IDEAS FOR NEW WORK; HOWEVER, ITS VALUE LOCALLY IS MEASURED BY ITS DAILY ACTIVITIES AND OVER-ALL YEARLY GROWTH.

A PRIMARY GAIN THIS YEAR WAS THE APPOINTMENT OF A FULL TIME LIBRARIAN.

FOR THE STAFF, THIS MEANT MORE NEARLY KEEPING ABREAST WITH THE CURRENT LITERATURE WHETHER CONCERNED WITH DEVELOPING AN EDUCATIONAL PROGRAM, PLANT IDENTIFICATION, COLLECTING NEW PLANTS, PLANT PROPAGATION OR PLANT CARE.

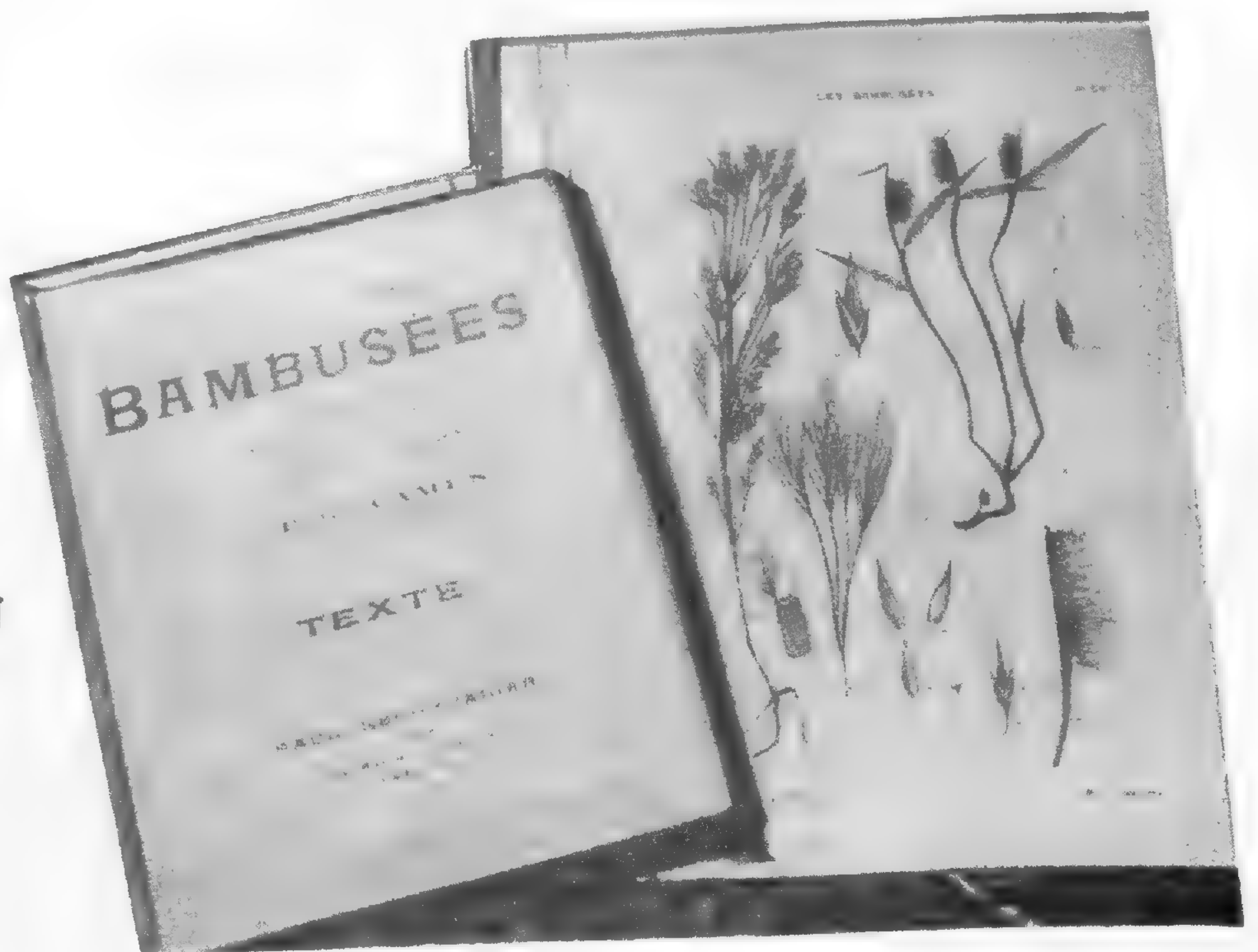
FOR PEOPLE OUTSIDE THE STAFF, SUCH USE OF THE LIBRARY WAS NOTICEABLY GREATER, THIS MEANT DATA FOR PLANT RESEARCH, BOTANY, HORTICULTURE, LOCAL HISTORY AND LANDSCAPING BECAME MORE READILY AVAILABLE.

FOR THE BENEFIT OF ALL, THIS MADE POSSIBLE THE CATALOGING OF ALL CURRENT ACQUISITIONS, AS WELL AS COMPLETING THE CATALOGING OF THE SECTIONS: HORTICULTURE, ORNAMENTAL PLANTS, FOOD PLANTS AND CALIFORNIANA. THIS LATTER ACTIVITY REPRESENTS HANDLING 413 BOOKS AND 1,199 PAMPHLETS.

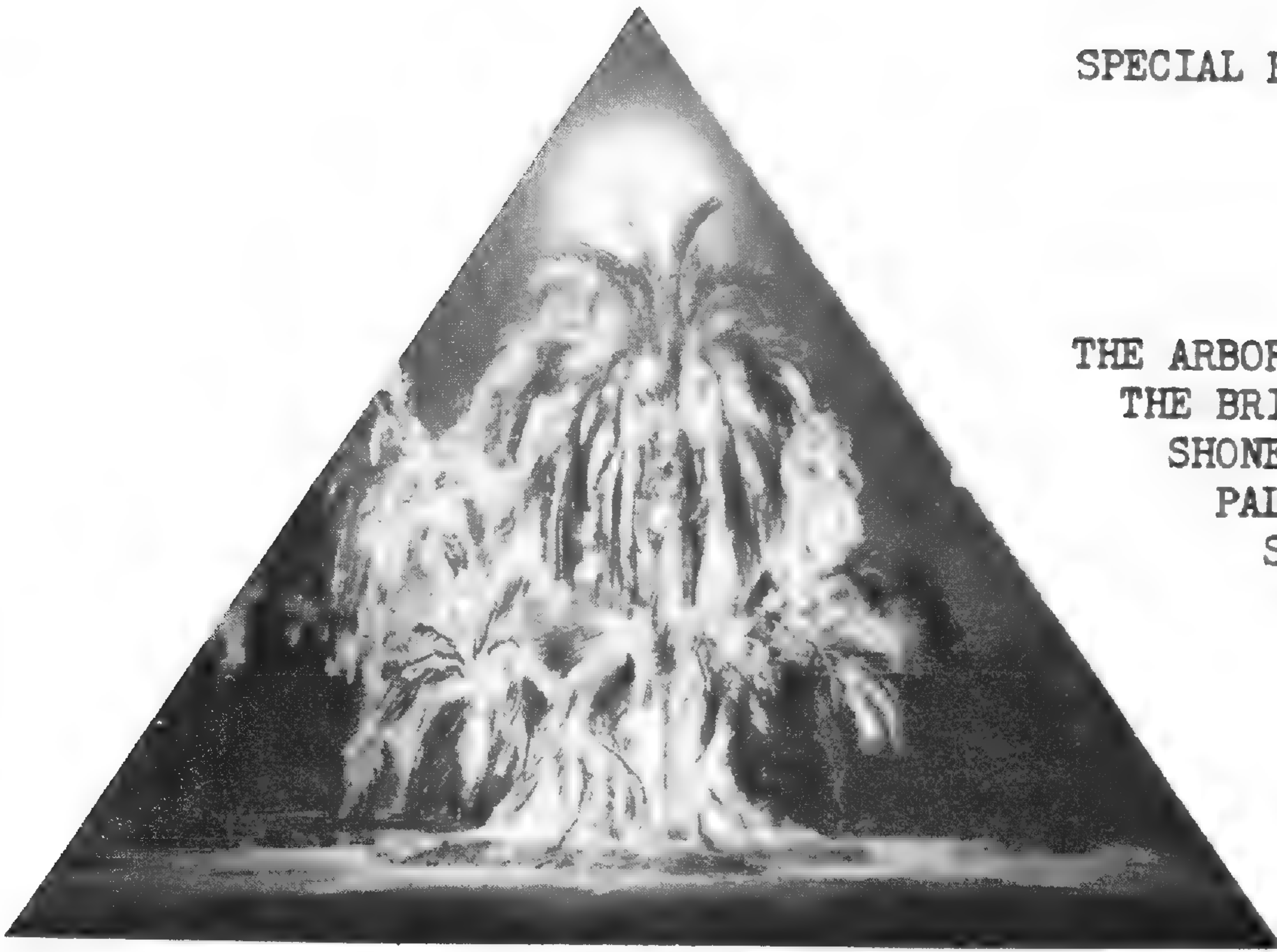
THE LIBRARIAN'S RESPONSIBILITIES WERE INCREASED BY THE FOLLOWING:

PERIODICALS:	SUBSCRIPTION, EXCHANGE, DONATIONS	202
BOOKS:	PURCHASES, DONATIONS	252
ON LOAN:	BOOKS, NON-CURRENT PERIODICALS, REPRINTS	647

INCLUDED IN THE LAST DIVISION WERE THREE OLD REGISTERS FROM A HOTEL WHICH WAS A SAN GABRIEL VALLEY LANDMARK. A COLLECTION OF HERB BOOKS WAS ALSO OF INTEREST. THE DONOR GAVE THE BOOKS BECAUSE OF THE GREAT INTEREST IN HERBS AROUSED BY OUR NEWEST PLANT ATTRACTION --- THE HERB GARDEN AT THE FOOT OF TALLAC KNOLL.



SPECIAL EVENTS



THE ARBORETUM'S CHRISTMAS GIFT:
THE BRIGHTLY LIGHTED STAR
SHONE ABOVE THIS GROUP OF
PALMS DURING THE CHRISTMAS
SEASON.

CAVALCADE OF HEALTH AND MEDICAL PROGRESS, SPONSORED BY THE LOS ANGELES COUNTY MEDICAL ASSOCIATION, JANUARY 6TH THROUGH JANUARY 15, 1956. A PORTION OF THE ARBORETUM'S BOOTH FEATURING EXHIBITS TITLED: SOILLESS PLANT CULTURE; SMOG SYMPTOMS OF PLANTS; DRUGS FROM PLANTS; GARDENING FOR HEALTH.





INFORMATION ABOUT THE ARBORETUM
DISPLAYED AT DESCANSO GARDENS
DURING THEIR ANNUAL CAMELLIA
FESTIVAL, FEBRUARY 25 - MARCH 11, 1956.

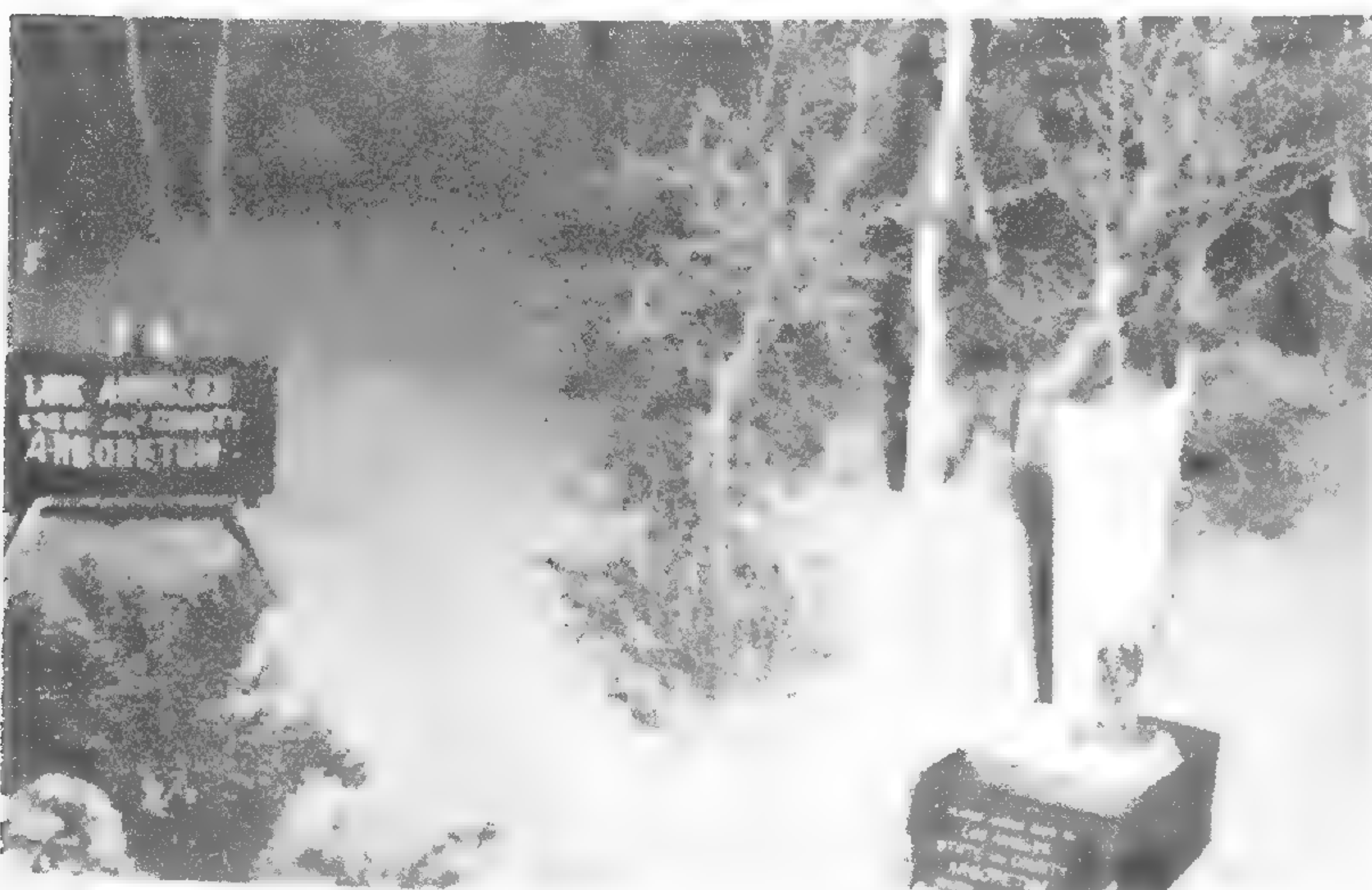
ARBOR DAY, MARCH 7, 1956.

MEMBERS OF THE LOS ANGELES
GARDEN CLUB, SOUTHERN CALI-
FORNIA UNIT OF THE HERB
SOCIETY OF AMERICA, THE
CALIFORNIA ARBORETUM FOUN-
DATION, THE ARCADIA SCHOOL
DISTRICT, THE ARBORETUM
STAFF AND VISITORS. THIS
PROGRAM WAS PLANNED AND
CONDUCTED BY GIRL SCOUT
TROUP #62 OF ARCADIA, AT THE
CONCLUSION OF THEIR TREE
BADGE COURSE.



THE INTERNATIONAL FLOWER SHOW; MARCH 17 THROUGH MARCH 25, 1956.

APPROXIMATELY FIFTY PERCENT OF ALL THE AUSTRALIAN PLANT MATERIAL USED IN THE
EDUCATIONAL EXHIBIT WAS FURNISHED
BY THE ARBORETUM. THE ARBORETUM,
IN COOPERATION WITH PIERCE JUNIOR
COLLEGE, ERECTED AND MAINTAINED THE
LANDSCAPE SECTIONS OF THE EXHIBIT.
SEVERAL ARBORETUM STAFF MEMBERS
SERVED IN THE INFORMATION BOOTH OF
THIS EXHIBIT. THE TROPHY SHOWN IN
THE PICTURE WAS AWARDED THE ARBOR-
ETUM FOR "MOST OUTSTANDING EXHIBIT,
EDUCATIONAL DIVISION".



THE BIG DITCH

CONSTRUCTION ON ONE OF THE FEW REMAINING SECTIONS OF THE ARCADIA WASH FLOOD CONTROL CHANNEL IS PROGRESSING THROUGH THE SOUTH AMERICAN AND AUSTRALIAN SECTIONS OF THE ARBORETUM. THIS CHANNEL PROVIDES PROTECTION FOR THE ARBORETUM AND RESIDENTS OF THE SAN GABRIEL VALLEY AGAINST DAMAGING FLOOD WATERS, DIRT, AND DEBRIS.

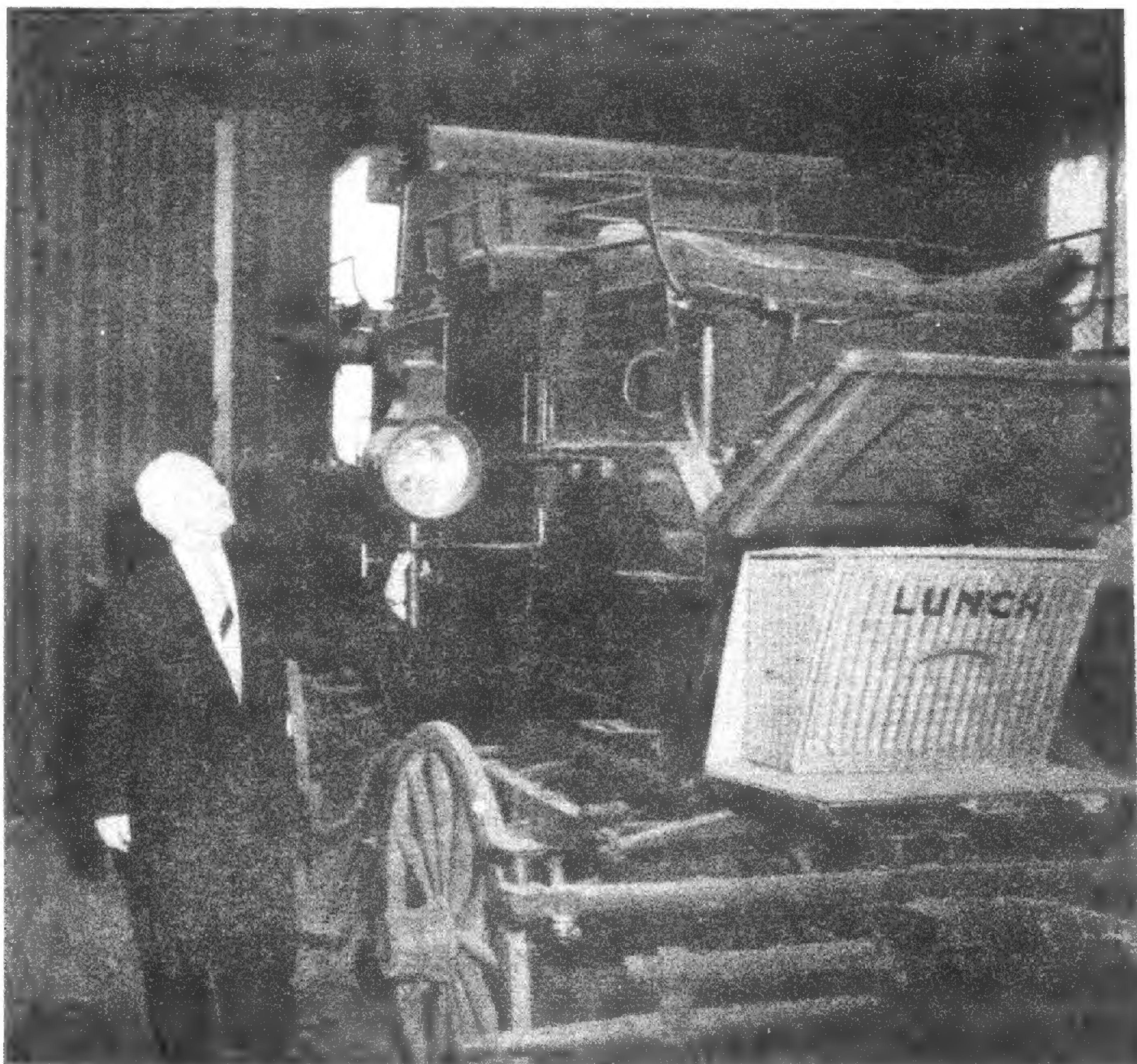


MEETING OF THE ATHLETIC AND RECREATIONAL TURF-GRASS ASSOCIATION.

PRESIDENT BOB BERLIN ADDRESSING THE MEMBERS FOLLOWING AN INSPECTION TOUR OF THE ARBORETUM GROUNDS AND TURFGRASS PLOTS.

A VISITOR

FORMER MAYOR OF LOS ANGELES, FLETCHER BOWRON, INSPECTS THE BALDWIN TALLY-HO. MR. BOWRON RECALLED VISITING THE FABULOUS RANCHO SANTA ANITA AS A VERY YOUNG BOY.



PUBLIC RELATIONS



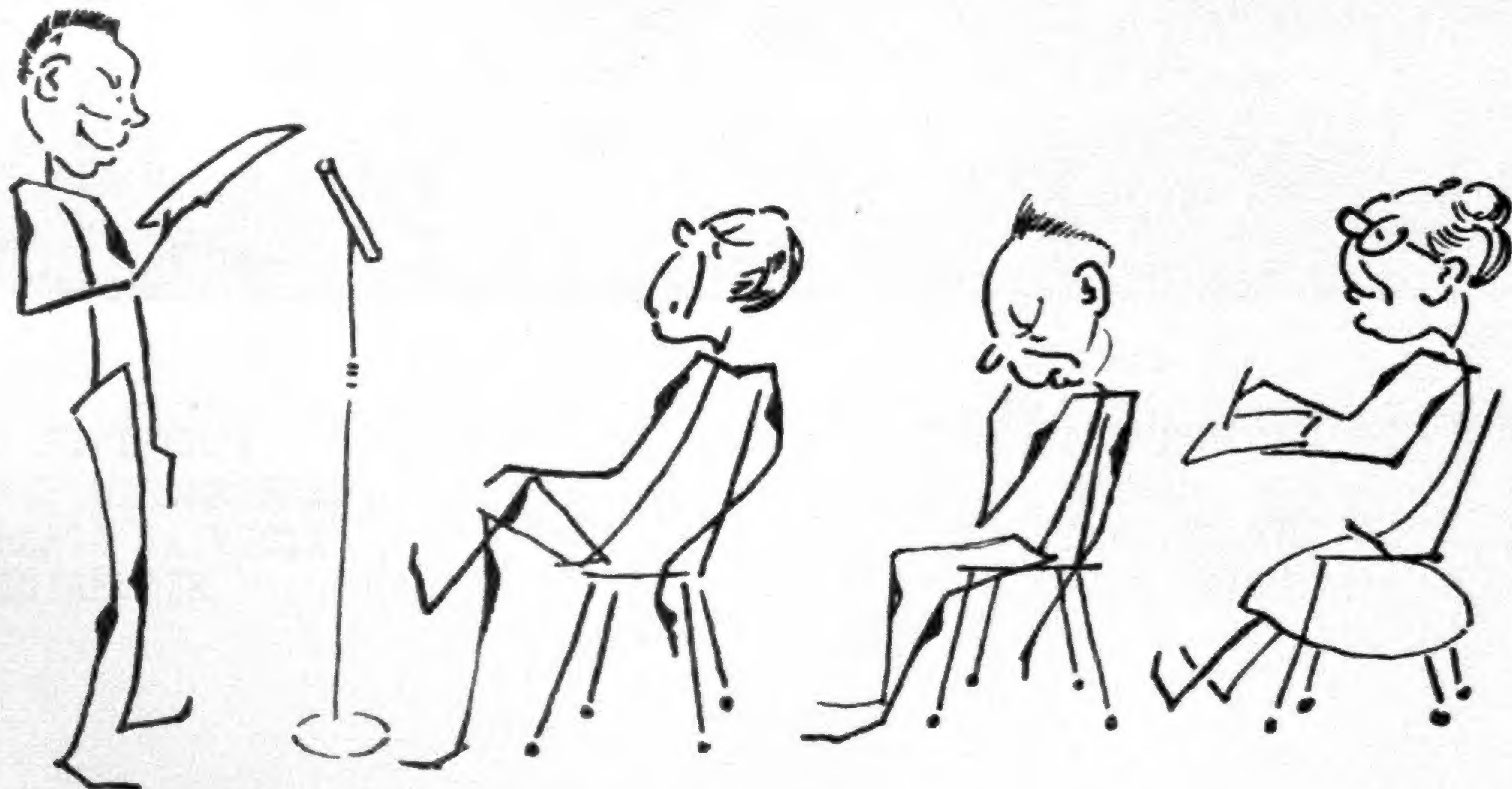
695 NEWSPAPER RELEASES
CARRIED THE STORY OF
THE ARBORETUM AND ITS
DEVELOPMENT.

STAFF MEMBERS VISITED AND GAVE TALKS ABOUT THE ARBORETUM TO 35 DIFFERENT ORGANIZATIONS, SUCH AS SERVICE CLUBS, CHURCHES, GARDEN CLUBS AND YOUTH GROUPS.

WE WERE INVITED TO PARTICIPATE IN 12 RADIO BROADCASTS.

SEVERAL TV NETWORKS COVERED VARIOUS PHASES OF THE ARBORETUM PROJECTS. NOTABLE AMONG THESE WERE A SERIES OF PROGRAMS BY JOE LITTLEFIELD ON HIS "GARDEN CHATS".

RESULTS OF ARBORETUM PLANT INTRODUCTIONS AND HORTICULTURAL RESEARCH WERE PUBLISHED BY STAFF MEMBERS IN LASCA LEAVES AND IN NATIONAL PERIODICALS AND BULLETINS.





A RIVEDERCI
AUF WIEDERSEHEN
HASTA LA VISTA
AU REVOIR

GOOD-BY

ALOHA
SAYNARA
DOS VIDAYNA
KALI NEETA

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